EPA REGION 2
Strategic Plan

January 2001

INTRODUCTION

Over the past year, many Region 2 staff have been involved in a planning process that will help us set our course for the next five years. The result of this process is the Region 2 Strategic Plan. Prior to developing this plan, regional staff evaluated data from State and EPA data bases, reports and planning documents to determine what are the major environmental problems in Region 2. This plan expresses Region 2 views of the region's most pressing environmental issues (Regional Priorities), and describes how Region 2 believes we should approach their resolution. However, the problems are not ours alone. The States, Indian Nations and other jurisdictions within the Region share these problems and responsibility for solving them. They have their own priorities and views as to how these problems must be solved. We must work together. The results of our cooperation will be expressed in the work plans or other agreements that we negotiate with the States, Indian Nations and EPA's national program managers. As we negotiate these agreements, we will consider the availability of resources, and the priorities of our partners in the States and Indian Nations. Establishment of short term milestones and longer term region specific measures of success will also occur within this context.

The Regional plan that follows is organized in five parts. Parts one through four describe Regional strategies for achieving the National Goals and addressing Regional Priorities related to: 1) Clean Air; 2) Clean and Safe Water; 3) Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems; and 4) Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response. Closely related activities that fall under National Goals six (Reduction of Global and Cross-border Environmental Risk), and nine (Credible Deterrent to Pollution) of the National Plan have also been incorporated into the plan. Headings, indicating the National Goals and Objectives supported by the strategies in the Regional Plan, have been placed in the text to show how regional priorities relate to the National Goals and Objectives. Each strategy contains a brief description of; the considerations that induced us to develop the strategy, the results we intend to achieve (from the EPA National Plan), and a summary of the key actions necessary to achieve our goal. Part five describes the strategies that Region 2 plans to implement in order to achieve the Cross Program goals described below. We believe activities to support these goals are best characterized independent of the goal structure of the National plan.

Children's Health Region 2 will undertake actions, beyond those implicit in our base programs, to identify prevent and reduce environmental threats to children's health.

Contaminated Sediments Region 2 will implement and coordinate a cross program, interagency and interstate integration of contaminated sediment management programs to ensure the environmentally sound management of contaminated sediments.

Data Management Region 2 will improve our ability to identify, prevent and reduce environmental threats by developing and maintaining secure, consistently available, "state of the art," user friendly, integrated environmental information systems at Federal/State level, which are readily accessible to public - including ambient data; geospatial/landscape/place-based data; regulatory and compliance data; and associated programmatic data (grants, etc.).

Environmental Justice Region 2 will strengthen its Environmental Justice program initiatives to better safeguard minority and low income communities from disproportionately high and adverse environmental impacts.

Geographic Approaches Region 2's Geographic Approaches seek to: 1) protect, restore, and sustain the

quality of the land, air, water, and living resources in particular places and in ways that help ensure the long-term social, economic, and human health benefits for future generations; and 2) build strong local capacity so that communities can identify environmental and public health threats they are facing and then find solutions.

Groundwater Region 2 will manage groundwater contamination on an area wide basis that cuts across both programs and individual site boundaries. This will allow us to view groundwater contamination on an area wide basis, increasing the efficiency, effectiveness, and consistency of ground water contamination prevention and restoration efforts.

Indian Nations Region 2 will ensure close involvement of Indian Nations, and appropriate recognition of the unique relationship between the Indian Nations and the Federal government, in pursuit of its efforts to protect human health and the environment.

Re-invention and Innovation Although traditional regulatory programs are still the essential core of the EPA's mandated work, re-invention initiatives and innovative programs allow the Region to explore new solutions to complex and intractable environmental problems. Region 2 will continue to focus on innovation of environmental management, so as to promote efficiency, effectiveness and a more pro-active approach to addressing future demands for improved protection of public health and the environment.

An appendix describes the major national programs that are being implemented in order to achieve the goals in the National Plan. In our plan we have focused on what we believe to be the most important regional problems. However, there are many other activities that we participate in and this section describes them. These descriptions have been extracted from Headquarters guidance documents.

Sincerely,

Jeanne M. Fox
Regional Administrator

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National Goal: Clean Air
National Objective: Attain National Ambient Air Quality Standards (NAAQS) for Ozone and PM
Regional Priority: Ozone

Ozone or "smog" is one of the more pervasive and serious health threats to Region 2's residents. The documentation of the seriousness of ozone as an air pollutant is extensive. Ozone is a respiratory irritant that affects everybody, especially children, the elderly and people who suffer from heart or lung diseases. Ozone aggravates asthma and causes shortness of breath, coughing, wheezing, and eye and nose irritation. Ozone can also damage vegetation, forests and crops.

High quality, measured ozone data representative of all of New York and New Jersey has been available for almost two decades. The trends for one-hour ozone are downward over the past 20 years, as the states and EPA have implemented strategies to control ozone-forming volatile organic compounds (VOCs) and nitrogen oxides (NOx). The decreases have leveled off in recent years. However, the recently promulgated, stricter eight-hour ozone standard is being violated over a larger area than the old one-hour standard. Recent trends in eight-hour ozone are also level or show a slight increase. Because of their size and relatively low emissions, neither Puerto Rico nor the Virgin Islands experience ozone problems.

In addition, estimation techniques have been developed for predicting the extent of the problem where monitoring is not conducted and for predicting how future levels will respond to measures designed to control VOCs and NOx. This is valuable because there are control measures now in the works and planned that will (hopefully) decrease ozone levels in the future. The primary uncertainty at this time results from a recent court decision which has put on hold the implementation of the eight-hour ozone standard pending an appeal to be heard by the Supreme Court. The standard was adopted by EPA in July 1997 because recent health information suggests the existing one-hour ozone standard is not fully protective of public health.

Identification of Cross-cutting Threats Many chemical precursors of ozone are toxic organics which will be controlled by programs designed to reduce exposure to toxics and vice versa. A discussion of our plans for control of air toxics may be found in the Clean Air-Air Toxics section of this document. Pollution prevention activities, discussed in the Preventing Pollution -Improved Pollution Prevention section of this document, are also expected to lead to reductions in both ozone precursors and air toxics.

National result we intend to achieve Attain the NAAQS for Ozone by 2012.

Strategy EPA Region 2 proposes that we undertake and/or support the following priority activities in order to meet the national subobjective of reducing ozone so the air will be safer to breathe:

1) Assist the states in developing emission reduction programs to achieve their plans to reduce ozone to meet the health standards.

2) Assist states when they develop NO_x (nitrogen oxide) emission budgets and emission trading programs to achieve their plans in an efficient and cost-effective manner.

3) Work with states to refine emission inventory data from all sources, to evaluate the effectiveness of ozone precursor reductions, and to determine if the planned emission reductions will achieve the one-hour health standard.

4) Analyze Photochemical Assessment Monitoring Stations (PAMS) data to learn more about ozone formation.

5) Propose location of new monitoring sites and monitoring methods as needed.

6) Help the states find opportunities to inform the public about ozone health risks, including the ozone mapping program.

7) Work with the states and tribes to develop information to be used in a photochemical grid model for evaluation of controls needed to achieve the ozone health standards.

8) Implement programs that prevent degradation of air quality by ozone precursor emissions.

9) Help develop and implement new programs, such as Phase 2 of the reformulated gasoline program, the proposed Tier 2 vehicle standards and low sulfur gasoline, New York's Phase 2 low emission vehicle program and other programs needed to attain the health standard.

10) Implement air quality designations for the eight-hour ozone standard, insuring quality ozone monitoring data collection and storage and guiding the states and tribes as they prepare air quality designations for the eight-hour ozone standard.

11) Evaluate geographic patterns of ozone and ozone precursors to determine where regional reductions should occur to produce the maximum reduction of ozone in a cost-effective manner in the New York City and Trenton-Philadelphia air sheds.

12) Encourage multi-states modeling and emission reduction plans to reduce the impact of transported ozone and precursors on health.

13) Determine effects of reducing ozone and its precursors on other programs, such as reducing public exposure to toxic air pollutants and nitrogen deposition into water bodies.

14) Target VOC and NOx emission sources for compliance and enforcement activities.

15) With the assistance of the National Enforcement Investigation Center (NEIC) we will inspect and audit major sources of fugitive VOC emission, ensuring that the leak detection and repair (LDAR) programs at these sources are implemented correctly.

16) Implement a compliance assistance effort aimed at printing operations.

Regional Priority: Particulate Matter

EPA has previously regulated "coarse" particles, those smaller than 10 micrometers in diameter (PM-10). However,

recent health effects research has shown that "fine" particles, those 2.5 micrometer and smaller, and which travel deep into the lungs, are linked to premature death, chronic bronchitis and aggravated asthma. This is why in 1997 EPA adopted a new fine particulate matter (PM-2.5) national ambient air quality standard. However, a recent court decision has put implementation of this standard on hold pending an appeal to be heard by the Supreme Court.

Heavy duty diesel engines, such as those found in trucks and buses, are a major source of fine particles. This is particularly significant for many Region 2 environmental justice communities because of their proximity to waste transfer stations and bus depots and their very high asthma rates. Not surprisingly the Region has put a priority on gathering air quality data from these neighborhoods.

States have measured PM-10 concentrations since the late 1980s. The states began to install the new PM-2.5 network in early 1999. Consequently, a complete three year record, which is necessary to establish attainment or non-attainment of the PM-2.5 standard, will not be available until early 2002, or early 2003 depending how rapidly the states install the new monitors. However, special PM-2.5 monitoring initiatives in Harlem-Washington Heights (New York City), Queens County (New York City) and San Juan, Puerto Rico have given strong indications that, if monitoring had been conducted for three years and were conducted using reference instruments, levels would be shown to exceed the standard.

Identification of Cross-cutting Threats Fine particles can be formed photochemically in urban smog. Efforts to control ozone precursors, such as NOx and VOC, can reduce the levels of fine particles being transported into the Region, and reduce our contribution to those downwind of us. See the discussion under Clean Air-Ozone for a description of our planned efforts to reduce Ozone. National efforts to reduce energy consumption may also contribute to this goal by reducing consumption of fossil fuels. See the discussion under Global Risks-Regional Warming and Global Climate Change for our efforts in this area.

National result we intend to achieve Attain the NAAQS for PM2.5 by 2018.

Strategy EPA Region 2 proposes that we undertake and/or support the following priority activities in order to meet the national subobjectives of reducing PM2.5 so the air will be safer to breathe and improving visibility:

1) Assist the states to insure they will complete installing PM-2.5 monitors, insure that they are properly sited and that high quality data are collected and stored.

2) Evaluate PM-2.5 concentrations in areas where high concentrations are reported and in environmental justice areas.

3) Insure that tribes can operate PM-2.5 monitors where needed.

4) Refine our ability to identity sources of fine particulates, and guide the states and tribes as they prepare air quality designations, modeling and plans to reduce PM-2.5 concentrations to meet health standards.

5) Evaluate geographic patterns of PM-2.5 and speciated PM-2.5 data to see if regional PM-2.5 reduction programs would be useful.

6) Guide states as they prepare technical analyses and plans for improving visibility.

7) Encourage multi-states modeling and emission reduction plans to reduce the impact of transported PM-2.5 on health and visibility.

8) Target sources in PM nonattainment areas for inspection, testing and enforcement.

National Objective: Reduce Emissions of Air Toxics

Regional Priority: Air Toxics

The Clean Air Act Amendments of 1990 identified as "hazardous air pollutants" (HAPS) 189 (revised to 188) toxic compounds that might be found in the ambient air, and mandated that ambient air exposures to them and emissions of them to air be decreased.

A 1999 emissions impact modeling screening study conducted by EPA called the Cumulative Exposure Project (CEP) showed that, of the 148 HAPs modeled using a 1990 emission inventory developed for the CEP, concentrations of eight HAPs exceeded the health benchmark concentrations in every census tract in the contiguous United States and that concentrations of at least one HAP exceeded the benchmark by a factor of 100 in about 10% of the census tracts. It should be noted that this CEP analysis did not include Puerto Rico and the Virgin Islands. However, EPA is in the process of updating its National Toxics Inventory and earlier modeling. These 1996 National Air Toxics Assessment (NATA) activities will be used to measure progress since 1990 in reducing risk from exposure to HAPs. This assessment will include New York, New Jersey, Puerto Rico and the U.S. Virgin Islands. EPA is also beginning preparation for development of a 1999 National Toxics Inventory.

The New York State Department of Environmental Conservation (DEC) has compared the 1990 CEP data to its monitoring results and has found a high degree of correlation between their monitoring results and the CEP predictions.

The 1990 Clean Air Act requires the application of maximum achievable control technology (MACT) to sources of toxic emissions. Implementation of the current MACT standard program has been delegated to New York, Puerto Rico, the Virgin Islands (major and area sources) and New Jersey (major sources only).

Identification of Cross-cutting Threats Many chemical precursors of ozone are toxic organics which will be controlled by programs designed to reduce exposure to toxics and vice versa. A discussion of our plans for control of ozone may be found in the Clean Air-Ozone section of this document. Pollution prevention activities, discussed in the Preventing Pollution-Pollution Prevention section of this document, are also expected to lead to reductions in both ozone precursors and air toxics. Asbestos and perchloroethylene are also air toxics. See the Preventing Pollution - Asbestos and Preventing Pollution-Dry Cleaners sections of this document for discussions of our strategies for dealing with them.

National results we intend to achieve By 2020, (1) reduce cancer incidence in urban areas by 75 percent (from 1990 levels) from stationary source emissions through a combination of federal, state, local and tribal regulatory programs and voluntary initiatives; (2) reduce cancer incidence from mobile source emissions by 65 percent through implementation of motor vehicle and fuels programs; (3) substantially reduce non-cancer risk from all sources; and (4) address disproportionate impacts on populations and areas, including for example, densely populated areas, children, and people who are highly exposed to water and food affected by air toxics.

Strategy Region 2's overall strategy is: to examine the 1990 and 1996 air toxics data and determine what progress

has been made in reducing emissions; evaluate what compounds remain threats; and create and implement plans to deal with the threats. The specific short term activities that will be undertaken to deal with the air toxics threats are:

1) Review measured ambient concentration data in EPA's official air quality data system (AIRS), data from the 1989 Staten Island/New Jersey Urban Air Toxic Assessment Project, and EPA's unpublished data archive to examine trends, to see how well they agree with the CEP results and to see if concentrations have changed since 1990. This will be used to reshape the risk concerns for the Region.

2) Enter archived data into AIRS

3) Repeat for Puerto Rico and the Virgin Islands the type of analysis of health benchmark exceedences for 33 HAPs performed for New York and New Jersey as part of NATA.

4) Perform a MACT standard implementation effectiveness analysis for small MACT sources, such as dry cleaners.

5) Participate in the national EPA group developing residual risk standards, initially for dry cleaners.

6) Oversee state efforts to monitor and enforce compliance with MACT standards and carry out EPA compliance and enforcement efforts where appropriate.

7) Participate in the national EPA group developing methods to enforce the Pharmaceutical MACT standard.

National Goal: Reduce Global and Cross-border Environmental Risks
National Objective: Implement Climate Change Technology Initiative

Regional Priority: Global Warming and Regional Climate Change

The continued release of green house gases worldwide is predicted to lead to a rise in average temperature potentially having significant effects on the public health, economy and infrastructure of areas within Region 2. A National climate change assessment has been completed. Region 2 jurisdictions are within four regional assessments: 1) Upstate New York (New England assessment at Tufts University), 2) Mid and South Jersey (Mid Atlantic assessment at Penn State University), 3) New York Metro Area (Columbia University and NASA/GISS), and 4) Puerto Rico and the U.S. Virgin Islands (South Atlantic Coast and Caribbean at Florida International University). Based on the assessments our primary concerns are:

1) Coastal flooding - The New Jersey coastline will recede. There will be increasing severity and frequency of tropical storm events in portions of the New York State, Puerto Rico and the U.S. Virgin Islands. All jurisdictions will lose storm buffering capability and suffer severe coastal flooding, wetlands loss and the Caribbean will suffer deterioration of coral reefs and mangrove swamps.

2) Urban Heat Island Effects - Three Region 2 metropolitan areas are predicted generators of an Urban Heat Island: Greater San Juan Puerto Rico, the New York City Metro Area and the Philadelphia Metro Area. Ground level air is heated by the heat from buildings and roads (dark colored building and road surfaces retain heat and release it at a steady rate); creating an increasing demand for electric power to sustain air conditioning capability; which eventually will not keep pace with the rise in temperatures. This exacerbates heat stress and worsens air quality, which impacts the elderly and children already at risk to summer urban air related stresses.

3) Vector borne disease - Increased rainfall will cause standing pools of water; providing additional breeding grounds for the carriers of vector borne diseases.

4) Water supply and quality - Sea level rise, storm surges, salt water plume extensions up the Hudson and Delaware River will potentially threaten both the supply and quality of water available to New York and New Jersey. Increased tropical storm activity will mean that Puerto Rico and the Virgin Islands will encounter potentially continuous storm water overflow problems affecting water quality.

Identification of Cross-cutting Threats Principal cross cutting threats are with public health concerns. Pesticides in groundwater will increase as more direct and continual application of pesticides to control the carriers of vector borne diseases will be needed. For discussion of this threat and our strategies to deal with it see the Clean and Safe Water Goal, Groundwater section, and the Preventing Pollution Goal, Mosquitoes/IPM section. Heat stress may also increase the incidence of asthma. See Preventing Pollution Goal, asthma section for our strategy for reducing asthma.

National results we intend to achieve By 2010, U.S. greenhouse gas emissions will be substantially reduced through programs and policies that also lead to reduced costs to consumers of energy and reduced emission leading to cleaner air and water. In addition, EPA will carry out assessments and analyses and promote education to provide an understanding of the consequences of global change needed for decision making. EPA programs are expected to offset forecasted growth by 20 to 35 percent relative to 1990 emission levels, equivalent to annual reductions of between 130 and 200 million metric tons of carbon equivalent in 2010.

Strategies

Region wide strategies -

1) Region 2 will increase public outreach on Energy Star Programs and Cool Communities Program to mitigate Urban Heat Island impacts. Upgrades in buildings and new buildings constructed to Energy Star Performance levels can provide a buffer against peak shortages and brownouts from the electric power distribution systems for the metro New York and Philadelphia areas.

2) Region 2 will increase public awareness of the impacts of climate change by expanding the number of stakeholders involved in the National Global Climate Change Assessment Program. Specifically, Region 2 is providing funds to the National Science Foundation which will subcontract to Columbia University a mitigation case study for Newark, New Jersey on the effects of the Urban Heat Island. The case study has attracted a commitment from the NJDEP to fund a similar analysis for Camden, New Jersey.

3) Region 2 is forming relationships with the University of Puerto Rico faculty who may be interested in undertaking a case study for the greater San Juan metropolitan area.

Geographic specific strategies

New Jersey - 1) Within available resources we will assist New Jersey to implement their Climate Change Action Plan. 2) Calibrate models to refine climate and air quality analysis. This is the first step to projecting the Urban Heat Island effect into urban New Jersey. Evaluate impacts of the Urban Heat Island effects in Camden and Newark. 3) Work with the EPA National Program Director for the Global Climate Change Research Program to coordinate future work on water supply and urban heat island for New Jersey. 4) Provide guidance on expanding Energy Star Programs in the state and initiate a Cool Communities program. 5) Encourage stakeholder linkup with American Forests, an NGO with expertise in urban forests enhancement, in order to reduce heat island effects by future planting of species that

provide the greatest cooling effects.

New York - 1) Examine the New York State Greenhouse gas action plan to determine appropriate actions. 2) Within available resources assist New York to implement their Climate Change Action Plan.

Caribbean - 1) A separate multi sector assessment needs to be undertaken. The existing Caribbean Regional assessment is limited to tropical storm impacts. Public health and, urban heat island impacts were not assessed. 2) Use the Climate Wise Program partnership in Puerto Rico to build stakeholders knowledge of the role of energy efficiency in mitigating the impacts of climate change. 3) Aid in forming a Greater Caribbean P2RX Center which will be composed of Metropolitan University of Puerto Rico (UMET), University of Puerto Rico and the University of the Virgin Islands. Region 2 will provide funds to initiate the Center at UMET. The Center will be an electronic catalog and resource referral system based on island needs for data and information on pollution prevention and energy. It is anticipated that in future years the Center will also serve as a focus for climate impact awareness for the Caribbean Region.

National Goal: Clean and Safe Water

The National Plan has three objectives under this goal: 1) Provide Safe Drinking Water, Fish and Recreational Waters; 2) Conserve and Enhance Nation's Waters and 3) Reduce Loadings and Air Deposition. EPA and the States implement a wide variety of control programs to achieve the objectives under this goal. We have structured our strategies for each objective into the following three parts: Base Programs which describe the national program strategies that we have and will continue to implement to achieve our objectives; Regional Priorities that deal with those threats which, despite the Base Programs, continue to hinder our ability to meet the objectives under the Clean Water Goal, and Geographic Strategies which address strategies having a geographic locus.

Identification of Cross-cutting threats Other significant threats affecting this goal are dealt with under the Clean Air, Better Waste Management and Preventing Pollution and Reducing Risk Goals. These threats include the issues of a) global warming which is projected to cause sea level rises of about 2 feet by 2100 and result in significant physical changes to wetlands and coastal areas as well as impact fresh water supplies and infrastructure, and b) Numerous active and closed underground storage tanks, operating hazardous waste generators and management facilities, abandoned waste sites, petroleum storage and transfer facilities and non-hazardous waste management facilities (e.g., municipal landfills) that have been and remain a significant source of direct and indirect (via release of contaminants from sediment) contamination to surface and groundwater resources. Through the UST, RCRA, CERCLA, UIC and EPCRA programs the Region and our states have major efforts underway to prevent new releases and clean up existing contamination.

National Objective: Safe Drinking Water, Fish and Recreational Waters

National results we intend to achieve By 2005, 1) 95 percent of the population served by community water systems will receive water that meets health-based drinking water standards, and 2) exposure to microbial and other forms of contamination in waters used for recreation will be reduced.

We need safe, clean water for drinking, recreation and fishing. Our Region's health, economy and quality of life depend on reliable sources of clean water. The EPA programs that address this objective are: 1) Public Water System Supervision (PWSS) program, that regulates public water supplies, 2) Source Water Protection program, that addresses contaminant threats to the sources of drinking water, and 3) Underground Injection Control (UIC) program that regulates the injection of waste into the ground.

Base Program Strategies

Public Water System Supervision Program The program will implement the base program by providing oversight of the authorized States' timely and appropriate response to significant non-compliance and taking direct federal enforcement actions, as necessary. Compliance by small upstate New York communities and larger downstate communities (i.e., NYC-Croton and Westchester Joint Waterworks) with schedules in place for compliance with the surface water treatment rule, as well as pending actions to obtain such schedules, will be closely tracked. The Region will support program development efforts, provide technical assistance (sampling and monitoring) and infrastructure development grants to the Indian Nations.

Source Water Protection Program New York, New Jersey and Puerto Rico are currently doing source water protection area assessments in accordance with their approved plans. The assessments should be completed by May 2003. Region 2 will continue to work with the States in the development of their assessments as well as the

implementation of voluntary source water protection activities. In New York, Region 2 will focus on improving the flow of information between EPA and the DEC and DOH.

Underground Injection Control (UIC) Program The highest priority for the UIC program in the next five years is implementation of new Class V injection well regulations, focusing in on these key areas, using a combination of outreach, technical assistance, compliance monitoring and enforcement: a) large capacity cesspools and new motor vehicle waste disposal wells are banned nationwide as of April 5, 2000, b) existing large-capacity cesspools will be phased out by April 5, 2005, (they must be replaced by an alternate means of treatment), c) existing motor vehicle waste disposal wells in certain areas will be phased out as dictated by States. The areas where the phase-out is to occur are the delineated ground water protection areas, according to the source water assessment plan and other sensitive ground water areas the states deem necessary. Close coordination between the UIC program and the states on this issue will be required.

Regional Priorities:

Residential Septic Systems Septic systems are the third most common source of ground water contamination in the United States. Septic systems (AKA onsite/decentralized waste water treatment systems) are frequently listed as a major source of impairment of fresh and coastal waters by Region 2 States, the Virgin Islands and the Commonwealth of Puerto Rico. We do not have assessments from the Indian Nations in our Region but, based on anecdotal evidence, believe they share the problem. Improper location, design or maintenance of septic systems can result in significant releases of nitrogen, phosphorus, viruses and bacteria into ground or surface water. Recent census reports indicate that typically 10% of septic systems are failing, but that this number may be as high as 70% in some communities.

Contamination resulting from septic system failure can be reduced by implementing the Technical and Programmatic Guidance for septic system management that was recently drafted by the Office of Water. Specific activities the Region will undertake, in cooperation with our States and the Indian Nations, to promote implementation, include public information seminars, training and document distribution. Other activities could include increasing the amount of easy-to-understand information on septic system planning and management on the web. Region 2 is also working with the States, the Virgin Islands and the Commonwealth of Puerto Rico to incorporate enforceable septic system policies and mechanisms, such as periodic inspections of septic systems to determine whether they are operating properly, in their Section 6217 Coastal Zone Act Reauthorization Amendments (CZARA) programs.

Targeted ground water monitoring of private wells in areas of dense septic systems and vulnerable hydrogeology will allow better assessment of the degree these systems are contaminating groundwater and eventually impacting surface water. Under the Peconic Estuary Program, fecal bacteria in the estuary will be DNA fingerprinted to determine what the source (human, dog, goose, etc.) of the contamination is. This will allow the Region to focus efforts on septic systems or sanitary sewer overflows if human feces are found to be the primary source of contamination.

Geographic Strategies

New York Bight Beach Monitoring Program Since the 1970's the Region has utilized a helicopter to conduct water quality monitoring of the New York Bight. This program has evolved and now includes ocean monitoring to protect the bathing public, dissolved oxygen and phytoplankton monitoring for trends, and floatable surveillance to prevent beach closures. The helicopter is also used to respond to any environmental emergencies; as an educational platform; and to assist state agencies in additional sampling (i.e., NEPPS, Shellfish).

New York City Watershed EPA has retained primacy of the Surface Water Treatment Rule for NYC's unfiltered Catskill and Delaware Public Water Systems. Since 1992, Region 2 has issued a series of Filtration Avoidance Determinations (FAD) for the NYC Catskill/Delaware Water Supplies. The most recent FAD was issued in 1997 and requires that New York City develop and implement several watershed protection strategies. In May 2000, Region 2 completed a comprehensive "midterm" review of the City's watershed protection program. Region 2 will continue to oversee implementation of the FAD requirements, including participation at quarterly enforcement conferences to monitor timely and appropriate response to National Pollutant Discharge Elimination System (NPDES) violations in the watershed, and will continue to fund to New York State's implementation of an enhanced monitoring program for the watershed. Region 2 is scheduled to make its next filtration determination for the Catskill/Delaware system in April 2002. Region 2 will also track and ensure compliance with the Croton Consent Decree to ensure that the filtration plant for this watershed is completed by 2007.

Non-PRASA Drinking Water Systems A large number of these systems are not in compliance with the Surface Water Treatment Rule (SWTR). In order to improve compliance, Region 2 will continue to work with its partners, such as the Puerto Rico Department of Health (PRDOH), Rural Housing Improvements (RHI), National Rural Water Association (NWRA), the Puerto Rico Aqueduct and Sewer Authority (PRASA), Partnership for Pure Water (PPW) and the Agriculture Extension Service. The Non-PRASA strategy includes specific objectives that include: 1)reducing the number of surface water systems; encouraging the connection of non-PRASA systems to PRASA when possible; 2) installing disinfection equipment in all non-PRASA systems; 3) creating a surveillance program to assure adequate operation and maintenance of the non-PRASA systems; 4) establishing enforceable compliance schedules in Administrative Orders, and 5) improving public water supply quality through a reduction of positive bacteriological results.

Puerto Rico Water Supply Management Puerto Rico has serious water supply and quality problems. Groundwater resources on the island are limited by saltwater encroachment and past pollution. This would include the potential for high quantities of nitrogen currently in the unsaturated zone to impact underlying aquifers in the future.

The Region will lead an effort to coordinate Federal and Commonwealth agency activities impacting water supply, protection and management. A committee with members from the Department of Natural and Environmental Resources (DNER), the Environmental Quality Board, the Environmental Protection Agency and the Geological Survey will be established to facilitate development of a Water Management Plan to ensure that drinking water supplies and key ecological habitats are preserved. This Water Management Plan will describe the current condition of water quality and quantity on the island (explicitly inventorying the locations extraction and expected recharge rates for all surface and groundwater supplies), develop a long term plan for resource management, and clearly define agency roles and responsibilities. Members of the committee will also serve as advisers to DNER and EPA as they make drinking water supply, well permitting, and remedial action decisions.

National Objective: Conserve and Enhance Nation's Waters

National result we intend to achieve By 2005 increase by 175 the number of watersheds where 80 percent or more of assessed waters meet water quality standards, including standards that support healthy aquatic communities. (The 1998 baseline is 501 watersheds out of a national total of 2262.)

To restore our Region's waters and aquatic ecosystems, we are using a watershed approach: This approach considers the whole hydroponic system and is the key to setting priorities and taking action to clean up rivers, lakes, and coastal waters. Under this objective, we will 1) work with the states to strengthen water quality standards, 2) rely on the

development of Total Maximum Daily Loads (TMDLs) for impaired bodies of water to address pollutant loading threats, and 3) ensure that comprehensive dredged material management plans are put int place to maintain, restore and improve the health of coastal waters.

Base Program Strategies

Water Quality Standards (WQS) Program Region 2 will continue to work with states as they review and revise their WQS. We are currently focused on activities, such as evaluating New York State's triennial review/revision package, which includes revisions required by the Great Lakes Water Quality Guidance (GLWQG), as well as other non-GLWQG revisions including the adoption of New York - New Jersey Harbor site-specific copper criteria; the public noticing of wildlife criteria in the fall to be adopted by NJ in 2001; the development of a New Jersey WQS rule proposal; Working with Puerto Rico and U.S. Virgin Islands as they review and revise their WQS; working with the Saint Regis Mohawk Tribe so that they can ultimately administer their own tribal WQS program.

303(d)/TMDL Program Strategy

New Jersey- The Region will participate in a State/Federal workgroup to complete a Tier 2 development pilot and a plan for implementing Tier 2 TMDL development in NJ. We will continue implementation of existing MOA and modify if necessary to address Tier 2 TMDLs.

New York - The Region will continue to work with the DEC to develop an updated Memorandum of Agreement that will address how TMDLs will be developed on a watershed basis.

Puerto Rico -The Region will assist the EQB in starting to develop TMDLs on a watershed basis, resulting in the development and implementation of an MOA for the development of TMDLs in impaired waters.

U.S. Virgin Islands - The Region will continue to work with DPNR in developing TMDLs for the priority water bodies, resulting in the signing of a MOA that will address the development of TMDLs for 303(d) listed waters.

Dredged Material Management The Region will continue efforts to work with the US Army Corps of Engineers (USACE) and all interested stakeholders to bring about an environmentally protective dredged materials management program which will enable economically sustainable ports. Specifically, the Region will complete the peer review process of the dredged material testing evaluation framework utilized to determine suitability of dredged material for use as Remediation Material at the Historical Area Remediation Site (HARS). The Region will complete its review of the HARS Testing Evaluation Framework as well as doing Dredged Material Project Reviews and completing the Dredge Materials Management Chapter of the HEP. The Region will continue to manage the four Water Resources Development Act (WRDA) projects and oversee their development. These projects support the development of promising sediment decontamination technologies such as sediment washing, thermal processes and solidification. The Region will work with USACE and other stakeholders on dredged material management in the Port of San Juan.

Habitat Protection/ Wetland Protection Region 2 has been and will continue to augment its base wetlands program with strategies to prioritize our protection efforts in areas with great development pressure while also increasing public awareness for the values of wetlands. Rather than waiting to react to permit applications, when many infrastructure and local land use decisions have already been made, necessary development can be steered away from high value resources. This provides more certainty for the development community while protecting the majority of the resources. Grant and Interagency Agreement-supported outreach and education efforts designed to promote wetlands protection in high-growth areas are underway in Saratoga County, Staten Island, and the Great Swamp in Dutchess and Putnam

County. We will also continue to use our enforcement authority to augment these non-regulatory protection efforts - evaluating their success and identifying other opportunities for similar initiatives.

Habitat protection activities will continue in the Great Lakes Program and in the Delaware Estuary. Habitat enhancement activities are also planned for the Hudson River.

Regional Priorities:

Contaminated Sediment This priority is multi-program and is discussed in detail under cross-cutting goals in section 5 of this document.

Geographic Strategies

Barceloneta-Manati CBEP The Wellhead Protection Workgroup (WHPW) has been established by the local NGO, COTICAM, and is known as "Instituto Ambiental COTICAM de Puerto Rico-Guardianes del Agua Subterránea". The WHPW consists of members from the eight municipalities, EQB, EPA and COTICAM. Field data will be gathered (e.g. location of drinking water wells, potential pollution sources, among others) throughout the eight municipalities by the WHPW and the workgroup will continue with educational outreach activities.

Barnegat Bay Estuary (BBE) The Region and its partners will continue to finalize the BBE's Comprehensive Conservation and Management Plans (CCMP) this year and will begin to implement the priorities identified in the plan.

Delaware Estuary Program (DEP) EPA Regions 2 and 3, and its partners will continue to implement the CCMP including: 1) forming a watershed implementation team, 2) reducing/eliminating PCBs, 3) establishing uniform or compatible fish collection/analysis procedures and fish assessment/ reporting requirements for fish consumption advisories, 4) determining target areas for habitat restoration and partner with citizens, business and industry and government agencies to complete restorations, 5) developing a suite of Environmental Indicators for the estuary, and 6) developing a plan for the preservation of horseshoe crab habitat, health and populations.

Lake Champlain Region 2 will continue to work with Region 1 and our other partners to implement the pollution prevention, control and restoration plan, *Opportunities for Action* (OFA). The priorities for the Lake Champlain Basin are: 1)reduction of phosphorus from point and non-point sources within the watershed; 2)prevention and control of toxic substances both lake-wide and in localized areas; and 3)implementation of a comprehensive plan to control nuisance non-native species.

Long Island Sound (LIS) EPA and its partners will continue to implement the CCMP by working towards the following goals: 1) reducing nitrogen loads to LIS by 58.5% within 15 years, 2) restoring 2000 acres of habitat and 100 river miles for anadromous fish passage in 10 years, 3) Expanding watershed protection efforts to address Non-Point source pollution, 4) Increasing public awareness and involvement in LIS issues and 5) publishing a state-of-the-Sound report in 2000 using environmental indicators.

NY-NJ Harbor and Estuary Program (HEP) Some of the areas that HEP CCMP is focusing on include: 1) Habitat acquisition and restoration, including the coordination of Bond Act funding, identification and description of sites and integration with the Mid Atlantic Federal Partners for the Environment, 2) Continuing work under the CARP program to estimate loadings of toxics to the harbor. Information from this effort will also be used for TMDLs, 3) Implementation of the multi-agency Floatables Action Plan, and 4) Continuing the toxics track-down work that is being undertaken by several entities including the states and NJ Harbor Dischargers.

Onondaga Lake Region 2 and its State and Federal Partners will continue to implement/develop the two major remedial plans that address the clean up efforts for Onondaga Lake. These plans are the Amended Consent Judgment (ACJ) and the ongoing process of developing the remedial plan for hazardous waste for the listing of Onondaga Lake on the Superfund National Priorities List.

The ACJ established a phased approach of 11 separate Metro Waste Water Treatment Plant (WWTP)-related projects and 15 CSO projects, whereby, the discharges from Onondaga County's Metro STP (to Onondaga Lake) and its CSOs (to Lake tributaries) would be brought into compliance with applicable State WQS over the next 15 years. The Army Corps of Engineers through the Onondaga Lake Partnership is responsible for planning, designing and constructing projects that are consistent with the Onondaga Lake Management Plan and that comply with the ACJ. In cooperation with Region 2 and with other appropriate Federal Agencies, the State of New York and local government the Partnership will develop and implement the projects necessary to restore, conserve and manage the Lake. Funding for the various projects will be shared by federal and non-federal entities and through grants.

Peconic Estuary Program (PEP) A draft *Comprehensive Conservation and Management Plan (CCMP) for the Peconic Estuary* was released for public comment in the fall of 1999. A final CCMP is scheduled to be completed in Fall 2000. CCMP activities will include: 1)Participating in and providing oversight of brown tide research efforts, 2) Convening meetings of the Nutrient Management Workgroups, 3)Developing and implementing management actions for the various sources, 4) Continuing trawl surveys, as well as monitoring of brown tide, water quality, and eelgrass, 5) Completing Habitat and Living Resources Research and Management Plan, 6) Completing Habitat Restoration Plan, 7) Improving delineation of "Critical Natural Resource Area" boundaries and work with towns to develop CNRA-specific management plans, 8) Initiating development of Regional Storm water Management Plan and sub-watershed management plans, 9) Conducting additional sediment toxicity and bulk chemistry sampling and analysis, 10) Closely coordinating with Superfund work at Brookhaven National Laboratory's Operable Unit V, 11) Completing Critical Lands Protection Strategy and Plan, and 12) Developing and disseminating effective public education and outreach materials using a variety of media.

San Juan Bay Estuary The Region and its partners will finalize the San Juan CCMP this year and begin to implement the plan. Key activities will include: eliminating sewage discharges into the Martin Peña Channel; restoring water flow between the San Jose Lagoon and the San Juan Bay through the Martin Peña Channel; filling depressions at the San Jose and Los Corozos Lagoons; developing and implementing community-based solid waste management programs, and enforcing existing related laws.

National Objective: Reduce Loadings and Air Deposition

National results we intend to achieve By 2005, reduce pollutant loadings from key point and nonpoint sources by at least 11 percent from 1992 levels. Air deposition of key pollutants will be reduced to 1990 levels.

Region 2 and its partners have made significant progress in reducing pollutant discharges from traditional point sources (industries and municipal wastewater treatment plants); however, discharges from "wet weather" sources such as combined sewer overflows (CSOs), storm water and sanitary sewer overflows (SSOs) remain the greatest challenge to the point source program. The Non-Point Source program addresses a number of the identified environmental threats partially, or not addressed by the point source program, including storm water, agricultural non-point sources, septic systems and atmospheric deposition. Region 2 is using the watershed approach to integrate management of the point and non-point sources of contaminant loading.

Base Program Strategies

National Pollutant Discharge Elimination System (NPDES) Oversight of the base NPDES programs will continue in NY, NJ and the Virgin Islands. EPA Region 2 is directly responsible for permitting, compliance monitoring and enforcement of permits for the NPDES program in Puerto Rico. Region 2 will implement the EPA/EQB agreed upon watershed strategy for issuing permits in Puerto Rico. The Region will work to maintain a high percentage of permits in Puerto Rico that are current and in effect. EPA Region 2 will take effective enforcement actions to ensure compliance with all NPDES permits in Puerto Rico. In the Virgin Islands Region 2 will continue its enforcement actions to ensure compliance at the plants operated by the Virgin Islands Department of Public Works.

Region 2's compliance assistance, compliance monitoring and enforcement priorities will include Significant Noncomplying facilities (i.e., NPDES, Pretreatment and Categorical Pretreatment IUs), as well as storm water, CSOs, SSOs, CAFOs and multi-media & sector-based enforcement. EPA Region 2 will continue to place special emphasis on compliance by all dischargers within the NYC Watershed. A framework for delineating responsibilities for implementing the watershed approach within Region 2 and with other Federal / Commonwealth agencies should be developed. The region will continue to work with NY and NJ to implement their CSO and CSO enforcement strategies.

Non-point Source (NPS) Management Program Strategy The Region will continue to work closely with the States to ensure NPS grant monies are targeted towards addressing NPS problems in high priority watersheds. We also will be working with the St. Regis Mohawk Tribe to develop their NPS Assessment and Management Plan. Currently all four Coastal Zone Act Reauthorization Amendments (CZARA) programs have conditional approval. EPA Region 2 will continue to work with NOAA towards the final approval of each State's NPS Pollution Control Program under CZARA.

Regional Priorities:

Agricultural Non-Point Sources Agriculture is a widespread source of the nutrients nitrogen and phosphorus. These nutrients, derived from the application of manure and fertilizer, contribute to the impairment of many water bodies in the region. Erosion of farmland contributes to sediment loadings which clog streams, rivers and reservoirs. Applications of pesticides and herbicides are also contained in runoff from farmlands and contaminate groundwater and surface water supplies.

Nutrient, manure, sediment/erosion control and pesticide management are being addressed by NPS and the CZARA Programs. States are required to develop management measures that include enforceable policies and mechanisms to ensure implementation of these agricultural management measures. Region 2's States manage their agricultural program efforts differently. New York uses their Agricultural Environmental Management program and the Virgin Islands uses conservation and Earth change permits; both of these approaches are enforceable. Puerto Rico has an extensive permit/inspection program while New Jersey implements measures through voluntary conservation plans administered under the State's Agriculture Retention and Development Act. Region 2 will continue to support the NY, NJ, Puerto Rico and the Virgin Islands in the development and implementation of comprehensive NPS plans.

Agricultural releases from animal feeding operations which meet specified size criteria (e.g., 700 mature dairy cattle, or 2,500 swine over 55 pounds) are known as Concentrated Animal Feeding Operations (CAFOs) are considered point source releases and are subject to NPDES permitting. Smaller Animal Feeding Operations (AFOs) are addressed by a joint EPA/USDA AFO Strategy titled Unified National Strategy for Animal Feeding Operations, which was published in March of 1999. The strategy provides recommendations for voluntary action by AFO operators, such as development of nutrient management plans.

The Region will continue to build an improved communication network between regulators, planners, and the agricultural community; especially through its relationships with the agricultural extension services. The Region is working with the States of New York and New Jersey to develop CAFO enforcement strategies. The strategies, which will be completed by 9/30, will call for compliance assistance in partnership with State Agricultural Agencies, the States to inspect 100% of CAFOs by 2003, focusing on high priority CAFOs by 2001, and enforcement of general or site-specific permit requirements where necessary. Region 2 will continue to encourage NJDEP to issue a general permit for CAFOs and impose effluent guidelines in its permits.

The Region is planning to implement a more active CAFO permitting and compliance program in Puerto Rico by beginning with the identification of the universe of CAFOs and AFOs. Permit issuance will be used as a means to regulate CAFOs. Based on the Region's knowledge of the Virgin Islands, we do not believe there are any CAFOs. However, in FY 2000 we are developing an inventory of facilities and will seek to improve our depth of knowledge on this issue.

Targeting groundwater monitoring of groundwater quality in areas of intensive agricultural activity will allow EPA and the State to better focus their efforts implementing agricultural Best Management Practices.

Atmospheric Deposition Atmospheric deposition is a serious problem that has impaired the quality of numerous water bodies in Region 2. Acid rain is the most well known form of atmospheric deposition and has been listed as the primary source of water quality impairment in 397 New York water bodies. Other examples include nutrient impairment to Long Island Sound and New York Harbor in the form of airborne nitrogen, and airborne mercury responsible for the contamination of many lakes in New Jersey. The Region plans on implementing the following strategies to address these specific problems:

Acid Rain - The Region will implement the national strategy in order to reduce atmospheric emissions of sulfur and nitrogen oxides from a 1980 baseline. We believe the overall national goal has been exceeded at the large coal burning power plants targeted by EPA. However, the Midwestern plants lag on nitrogen controls, and acid rain impacts remain a concern in the Adirondack region. We plan to implement Phase II of the national strategy which will impose restrictions on a larger number of smaller and cleaner coal, oil and gas burning plants. New York State is independently reducing sulfur emissions 50% and nitrogen emissions 30% beyond the Clean Air Act goals in an attempt to further reduce the impacts of acid rain.

Nitrogen (nutrient reduction) - The Region will implement the national strategy for attaining ambient air quality standards for ozone to reduce atmospheric nitrogen deposition. Nitrogen oxide emission budgets have been established by EPA. It is expected that these efforts will result in 5% to10% reductions in nitrogen loadings resulting from air deposition.

Mercury and other toxic substances - The Region will continue to participate in the NJ Mercury Pollution Task Force. The Task Force will issue recommendations by the end of the year. Region 2 will participate in implementing the recommendations and in applying them, as needed, in other jurisdictions. The Region has underway a study to assist us in quantifying and understanding the sources of contamination in the NY/NJ Harbor. Results of this study will be used to design programs to reduce loadings and the programs replicated, as needed, in other areas of the region.

Combined Sewer/Sanitary Sewer Overflows CSOs and SSOs result in releases of raw sewage. The health and environmental risks attributed to CSOs and SSOs depend on a number of factors including location, season (varying

potential for public exposure and habitat impact), frequency, volume, the amount and type of pollutants present in the discharge, and the uses, conditions, and characteristics of the receiving waters. The most immediate health risks associated with CSOs and SSOs to our waters are bacteria, viruses, and other pathogens.

In addition to pathogens, raw sewage may contain metals, synthetic chemicals (including endocrine system disruptors and pesticides), nutrients, and oils which can be detrimental to the health of humans and wildlife. Water quality impacts from CSOs and SSOs may also include changes to the physical characteristics and viability of aquatic habitats causing oxygen depletion and fish kills. These impacts, in turn, can cause adverse economic impacts such as beach and shellfish harvesting closures, increased risks and demands on drinking water sources, and impairment of people's ability to use waters for recreational purposes.

The Region will continue to oversee New York and New Jersey's implementation of their CSO strategies. In Puerto Rico, we do not have clear documentation of the existence of combined sewer systems in the San Juan area. The Region will work with Commonwealth agencies to make this determination and address any problems identified.

The Region has developed CSO Enforcement Strategies with the States to ensure compliance with both short and long-term CSO Policy and NPDES permit requirements. Currently, we address unpermitted SSOs in NY and NJ as they are identified. Certain SSO points are permitted in the state of NY. We have requested that both states, as part of the State-specific SSO Enforcement Strategies under development, complete an inventory of known SSO points and identify actions necessary to eliminate and reduce unpermitted SSOs. EPA is also currently developing a National SSO Policy which will include permit language and guidance regarding the elimination of SSOs. The states will be requested to develop their own SSO strategy based on the National SSO Policy. In Puerto Rico and U.S. Virgin Islands, Region 2 will implement the National SSO Policy once it is finalized and, in PR, will continue to enforce against SSOs as we become aware of them.

Clean Water Act (CWA) 301(h) Variance Decisions/PR/EPA MOA Implementation
Decisions on pending variance applications for 6 Puerto Rico POTWs must be made following completion of application requirements by PRASA. The proposed decisions will be in the form of draft NPDES permits for the six PR plants and related decision documents including associated Environmental Justice analyses. Hearings will be held to ensure public participation prior to final decisions.

Due to its poor compliance with the minimum primary floor and 301(h) requirements, Region 2 has proposed denials of the waiver applications for the St. Thomas and St. Croix facilities. Region 2 will make final determinations after full consideration of the public comment that is received.

Development Pressure Conventional patterns of development adversely impact wetlands, rivers, lakes, estuaries and near coastal waters. Many communities are dealing with intense urban and suburban development and are faced with the challenge of implementing environmental protection and water quality-based controls while trying to meet conflicting expectations and preferences of the public, developers, and environmentalists. Development typically increases storm water runoff and nutrient loading to water bodies while decreasing the overall acreage of wetland habitats that could reduce flooding and contamination from excess nutrients.

As one of the Clean Water Action Plan initiatives, Region 2 will continue to work with the Mid-Atlantic Federal Partners for the Environment (MAFPE) to implement the Memorandum of Agreement to reduce Regional Urban Sprawl. We will assist our local partners in the identification and implementation of sprawl reduction pilot projects in the NYC area.

Proposed pilot sites are the NYC Watershed and the Barnegat Bay Estuary. The Region will also continue to participate in the Urban Resources Partnership/New York City initiatives.

Polluted Runoff According to the 1996 National Water Quality Inventory, a leading source of water use impairment is polluted runoff. A portion of this runoff is discharge during storm events through CSOs and storm sewers. However the remaining runoff in urban areas and at construction sites directly enters rivers, streams, lakes, and estuaries, creating impacts such as those created by CSOs and storm sewers. Agricultural point source run off from CAFOs will be addressed through the CAFO Enforcement Strategies previously described.

Some releases of storm water runoff are addressed under the NPDES program using a phased approach. The Phase I Storm Water Rule introduced a storm water regulatory program that addressed discharges of storm water from municipalities with populations greater than 100,000, and storm water runoff from industrial activities, including large construction sites. The Storm Water Phase II Final Rule is the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted storm water runoff. The Phase II program expands the Phase I program by requiring additional operators of municipal separate storm sewer systems (MS4s) in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted storm water runoff. Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of storm water discharges that have the greatest likelihood of causing continued environmental degradation.

The NPDES storm water program is implemented by the States of New York and New Jersey. Region 2 is responsible for implementation of the storm water program in Puerto Rico. The U.S. Virgin Islands must develop and implement regulations for storm water programs.

Crucial to the successful implementation of the Storm water Program are compliance assistance, compliance monitoring and enforcement activities by the States and EPA. Region 2 has encouraged active State programs and has taken, and will continue to pursue, a substantial number of enforcement actions for both unpermitted storm water discharges and violations of storm water multi-sector and construction general permits in PR.

Storm water that is not addressed by NPDES (e.g., construction projects of less than one acre) may be addressed by the NPS Program. NPS Pollution includes construction site erosion/sediment control and construction site chemical control. NY and NJ have storm water control measures in their approved NPS management plans.

Reduce Global and Cross-border Environmental Risks

Restoring Integrity of Great Lakes Basin

National results we intend to achieve Restore and maintain the chemical, physical, and biological integrity of the Great Lakes Basin Ecoystem, particularly by reducing the levels of toxic substances, protecting human health, restoring vital habitats, and restoring and maintaining stable, diverse and self-sustaining populations.

Great Lakes Region 2, Environment Canada, the Ontario Ministry of Environment, and the New York State Department of Environmental Conservation will continue to work in a partnership to implement a Lake wide Management Plan (LaMP) to restore the beneficial uses of the Lade Erie and Lake Ontario.

The Niagara River The Niagara River Remedial Action Plan (RAP) addresses use impairments, sources, and existing

remediation programs, and recommends future remedial strategies. Region 2 will continue tracking progress of RAP implementation through: plan review/update; regular progress status reports with work plan activity identification; and, public participation coordinated through an advisory committee.

National Goal: Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems
National Objective: Reduce Public and Ecosystem Exposure to Pesticides
National results we intend to achieve By 2005, public and ecosystem risk from pesticides will be reduced thru migration to lower-risk pesticides and pesticide management practices, improving education of the public and at-risk workers, and forming "pesticide environmental partnerships" with pesticide user groups.

Regional Priority: Agricultural/ Integrated Pest Management (IPM)

Agricultural pesticides can have adverse effects, such as contaminating ground water. Successful Integrated Pest Management (IPM) techniques need to be identified and used to limit the use of agricultural pesticides. Extensive studies by the US Geological Survey (USGS) have identified pesticide contamination in ground water. In response, EPA has issued a ground water monitoring strategy and has drafted a Pesticide Management Rule to increase control of four specific pesticides. One way to reduce ongoing contamination of ground water is to actively encourage IPM outreach.

While there are no mandatory requirements to implement agricultural IPM, EPA promotes the use of IPM by agricultural commodity producers. National goals related to the reduction of agricultural use pesticides are supported by the regional promotion of IPM techniques in agricultural production settings.

Strategy

1. a. Base Program strategies
Use/Misuse Regulations -- Implementation of the use/misuse regulations is fully delegated to the states. Continued support of IPM organizations through grants is vital to maintain IPM communication between growers and individuals knowledgeable in this area. Under the delegated certification and training program, the states incorporate IPM training.

1. b. Strategies to address regional priorities not fully addressed by base program
Groundwater surveys will be used to identify areas impacted by pesticide contamination. Results of the surveys will be used to target IPM outreach efforts.

2. Geographic-specific strategies Based on the available data, Region 2 and its state partners will initially focus their agricultural IPM outreach activities in Nassau and Suffolk Counties in New York, and will add additional counties in New York and New Jersey as they are prioritized by the states. Also using the available pesticide use data for New York State, Region 2 and NYSDEC will develop and implement an Urban IPM Outreach program, targeting the low income - minority areas, where the pesticide use is greater. None of the four chemicals covered by the draft Pesticide Management Rule are major uses in the Caribbean. However, if we find evidence of contamination by any of the four target herbicides in Puerto Rico or Virgin Islands ground water, we will work with the state government to develop the appropriate chemical specific management plan(s).

3. Support for State, Commonwealth and Territorial and Indian Nation watershed initiatives.
New Jersey and New York are currently assessing the vulnerability of their various aquifers, and developing well

monitoring and sampling programs. Both states are taking effective steps to assess the impacts of pesticide contamination of ground water. Region 2 will continue to work with New Jersey and New York to identify and address areas that are most vulnerable and most impacted by pesticide usage. The Puerto Rico Environmental Quality Board has nearly completed development of a general State Management Plan, and the US Virgin Islands is in the initial phase of development of a State Management Plan. The Region is not aware of significant agricultural activity in the Indian Country of our Region, so no activities are planned in that area at this time.

Regional Priority: Mosquitoes/Integrated Pest Management (IPM)

Advance planning and coordination for surveillance operations and contingencies to control mosquito vector transmitted diseases are needed before each breeding season. Total reliance on the use of Ultra Low Volume (ULV) pesticides is not desirable to control the harmful mosquito population. Successful IPM techniques need to be identified and used to limit the use of aerially applied ULV pesticides.

It is desirable to stop transmission of vector transmitted diseases before they reach the outbreak stage. This will limit the scope of application and amount of ULV pesticide that is needed to control the disease vector. Several IPM techniques used to limit harmful mosquito populations include surveillance, source reduction, and non-ULV chemical/biological controls.

National goals related to the reduction of use of pesticides on agricultural commodities can also be applied to mosquito and disease vector control. The Food Quality Protection Act (FQPA) provides incentives for EPA and other agencies to promote integrated pest management which will result in reduced use of neurotoxic pesticides by the year 2005. The cumulative effects of overall exposure, related to use of pesticides, are also of concern.

Identification of Cross-cutting threats Modification and drainage of mosquito breeding sites may impinge on areas designated as wetlands.

Strategy

1. a. Base Program strategies

Pesticide Registration Standards - 40CFR Parts 152-155 provide standards for registering pesticides to be used for mosquito control. Special use exemptions may be granted for public health emergencies.

1. b. Strategies to address regional priorities not fully addressed by base program

Identification - The main priority is to implement surveillance programs throughout high-risk counties in the region. Identification and delineating areas contributing to the mosquito population will be major steps in limiting the use of pesticides and control of mosquito habitats.

Inform/Educate - Integrated mosquito management techniques should be performed in those areas determined to be active with vector transmitted diseases.

2. Geographic-specific strategies

Surveillance Operations - Surveillance strategies may include the use of traps and other indicators such as sentinel fowl and testing deceased birds for the presence of West Nile Virus (WNV). The state and county health departments are responsible for mosquito control within their respective jurisdictions. The state health departments are responsible for coordinating surveillance activities.

3. Support for State, Commonwealth and Territorial and Indian Nation watershed initiatives.
State Lead Agencies track pesticide use on an annual basis. An informal survey taken of NJ County Mosquito Control Commissions indicate that most counties employ one or more types of integrated mosquito control which includes surveillance, source reduction and water management techniques. EPA Region 2 needs to continue to work with the states to implement IPM.

Regional Priority: Safe Food

President Clinton signed the Food Quality Protection Act (FQPA) into law on August 3, 1996, representing a major step forward in the regulation of pesticide use in the United States. All tolerances established since FQPA have been set to be protective of children. To further increase protections for infants and children, EPA is requiring registrants to conduct acute, sub-chronic, and developmental neurotoxicity studies for at least 140 pesticides.

The Regional role in ensuring that pesticide residues on agricultural commodities meet FQPA tolerances includes an inspection program targeting agricultural commodity producers with particular emphasis on utilizing best management practices when using pesticides. Application rates and frequency of pesticide applications are examined at the sites along with ensuring that only properly registered pesticides are used on food crops.

Strategy

1.a. Base Program strategies
Complaints -- Region 2 will conduct a timely investigation of any food contamination compliant received from the USDA or any other agency and will initiate appropriate enforcement follow up for any violations found.

Exceedences -- Food production and distribution facilities for which exceedences are indicated will be targeted for pesticide misuse inspections in cooperation with the States. If a facility is found to be misusing any of the pesticides identified in the USDA referral, enforcement actions will be taken. To date, procedures for investigating food contamination referrals have been formalized between EPA and the Commonwealth of Puerto Rico.

1.b. Strategies to address regional priorities not fully addressed by base program
Food Surveillance - An interagency task force is initiating a food monitoring project to monitor pesticide residues on food commodities produced in New Jersey. This will become part of the base program.

Methyl Parathion and azinphos methyl – Region 2 has also embarked on a compliance monitoring effort regarding the implementation of the methyl parathion and azinphos methyl strategies. To this end, together with our State Lead Agencies (SLAs), we will conduct monitoring inspections of all pesticide producers, dealers/retailers, and users of these two pesticides.

2. Geographic-specific strategies
The first phase of a food monitoring project is underway in New Jersey. This project is an interagency initiative consisting of USDA, the U.S. Food and Drug Administration (FDA), New Jersey Department of Agriculture (NJDA) and NJDEP participation. Food produced in New Jersey will be obtained from the markets and tested for pesticide residues. Analysis of the food samples will be performed in New Jersey certified laboratories. Part of this project entails developing laboratory capability to perform the type of analyses required to monitor pesticide residues in food samples. Commodities to be included in the first phase of the project include tomatoes, apples, peaches, strawberries and blueberries. Data obtained from the project will be used to help target pesticide inspections and outreach

programs with emphasis on reducing pesticide use.

3. Support for State, Commonwealth and Territorial and Indian Nation watershed initiatives
To date, food contamination referrals have been received from the USDA for Puerto Rico only. Procedures for investigating food contamination referrals have been formalized between EPA and the Commonwealth of Puerto Rico, and will be developed with all Region 2 SLAs as referrals are received from USDA for those states. This program is still in its infancy.

The first phase of an interagency initiative to monitor food commodities in New Jersey will begin in early FY01.

Regional Priority: Worker Protection

The 1992 Worker Protection Standard (WPS) protects more than three and a half million people who work with pesticides at over 560,000 workplaces. The WPS represents a major strengthening of national efforts to safeguard the health of agricultural workers and pesticide handlers. Because of the length of exposure and the possible exposure to stronger formulations of pesticides used commercially, agricultural workers are particularly vulnerable. Many agricultural workers in Region 2 are migrant laborers who are lower income and/or minorities. Furthermore, children who work with their parents in the fields, or are subject to incidental exposure from contaminated clothing are especially susceptible to adverse impacts due to the added vulnerability of their developing systems.

Strategy

1.a. Base Program strategies
Worker Protection Standards - 40 CFR Part 170

Worker Protection Standard Pilot Study - In collaboration with the State Lead Agencies and Headquarters (OPP and OECA), Region 2 began development of a WPS Assessment protocol and survey format to gauge how the WPS program is implemented within the Region. A pilot study was conducted in the summer of 2000 to fine tune the project prior to full-scale implementation. The pilot WPS Assessment project targeted New York State counties with the highest pesticide use. The state will take appropriate enforcement actions for violations detected, with EPA support if necessary. Resources needed to perform the full-scale regional WPS Assessment will be determined based upon data obtained from the pilot study. If adequate resources can be directed toward a full-scale region-wide assessment, the next step will consist of planning for such an undertaking.

1.b. Strategies to address regional priorities not fully addressed by base program
Pesticide Incident Surveys - New York and New Jersey track pesticide related health incidents through calls to the poison control hotlines.

2. Geographic-specific strategies
Based upon the information obtained from the Pesticide Use Surveys, the SLAs and Regional Office may better target the enforcement and compliance assistance efforts to those counties where the greatest pesticide usage is observed. In NY, efforts will focus in Nassau (1,137,466 lb.), Suffolk (1,539,124 lb.), and Orange (734,964lb.) Counties. In NJ, efforts will focus in Gloucester (366,274 lb.), Cumberland (225, 431 lb.), and Atlantic (182,254 lb.) Counties.

3. Support for State, Commonwealth and Territorial and Indian Nation watershed initiatives.
Information on pesticide applications in Puerto Rico has only recently been collected and is not currently available.

Once identified, we may better target enforcement and compliance assistance efforts to those localities where the greatest pesticide usage is observed.

The US Virgin Islands and the Indian Country in Region 2 do not have significant agricultural activities and are not directly impacted by this objective. However, the marine industry in the US Virgin Islands makes extensive use of anti-fouling paints, which are registered pesticides. We are examining the applicability of existing worker protection standards to this industry. Worker protection standards are not an urban issue or an international or cross boundary issue, except to the extent that immigrant workers may not speak English.

National Objective: Reduce Lead Poisoning

Regional Priority: Lead Based Paint and its Associated Hazards

Lead poisoning in children causes the loss of IQ points, reading and learning disabilities, attention deficit disorder, reduced attention spans, hyperactivity, and other developmental problems. Pregnant women poisoned by lead can transfer lead to the developing fetus, resulting in adverse developmental effects.

Current information on lead suggests that the main sources of lead exposure for children under the age of six (6) are deteriorating lead-based paint, lead contaminated dust, and lead contaminated soil. More than 80% of homes in the U.S. built before 1978 contain some lead paint.

Lead hazards affect all of Region 2 including New York, New Jersey, Puerto Rico, and the Virgin Islands. Lead also has affects beyond tribal and international boundaries. EPA works with HUD and Health and Human Services (HHS) addressing lead poisoning prevention. The three agencies work together to ensure that the nation's housing is lead safe.

National result we intend to achieve By 2007, EPA will reduce the incidence of blood lead levels at or above 10 micrograms/dL, in children between the ages of 1 and 5 years from approximately 900,000 children in 1991 thru 1994 to fewer than 200,000.

Strategy

1. a. Base Program strategies

In an effort to protect our families from exposure to the hazards of Lead Based Paint (LBP), congress amended the Toxic Substances Control Act (TSCA) in 1992 to add Title IV, entitled Lead Exposure Reduction. Title IV of TSCA directs the Environmental Protection Agency (EPA) to address the general public's risk of exposure to LBP hazards through regulations, education, and other activities. Routine inspections of landlord, management offices and real estate offices are conducted to ensure compliance, and tips and complaints are pursued. Under Sections 402/404, the region and the delegated states issue certificates to training providers, and contractors, and monitor courses for adequacy and accuracy. Appropriate enforcement follow up is essential in all areas.

Section 1018 - Real Estate Disclosure Rule

To help protect people against lead hazards in homes, the EPA and the Department of Housing and Urban Development (HUD) developed the Real Estate Disclosure Rule. As of September 6, 1996, the owner of any home built before 1978 must follow the guidelines set out by the rule, and inform possible buyers and renters about known LBP hazards in the home. Before ratification of a contract for housing sale or lease: disclosure of known LBP; landlord, seller, and agent must give any buyer/renter a lead pamphlet "Protect Your Family From Lead in Your Home";

opportunity to inspect (buyer only). Sellers, Lessors, and Real Estate Agents all share responsibility for disclosure. Testing or removal of LBP by sellers or landlords is not required and this rule does not invalidate completed leasing or sales contracts.

Section 406 - Lead Based Paint Pre-Renovation Education Rule

One particular concern of Congress and EPA are the potential lead exposure risks that can occur during renovations of housing containing LBP. People can create lead hazards for their families without realizing it by disturbing surfaces containing LBP during renovations. Activities like scraping, sanding, or using a heat gun on surfaces that contain LBP can release large quantities of lead dust and fumes. Lead dust from renovations can remain in a home long after the work is completed. As of June 1, 1999, this regulation requires renovators, working for compensation, to distribute the pamphlet "Protect your family from lead in your home" to owners and occupants of housing built prior to 1978, before commencing the renovation activity. Activities covered by this rule include any renovation activity that disrupts more than 2 sq. ft of paint and common area renovations in multi-family housing.

Section 402/404 - Training and Certification Program for Lead Based Paint Activities

The EPA has issued new regulations to protect the public from the hazards of improperly conducted LBP activities. There are 4 key elements including: training and certification requirements to ensure the proficiency of contractors who offer to conduct LBP inspection, Risk Assessment, and abatement services in residences and day care centers; accreditation requirements to ensure that training programs provide quality instruction in current and effective work practices; work practice standards to ensure that LBP activities are conducted safely, reliably, and effectively; procedures for States and Tribes to apply to EPA for authorization to administer these elements at the State or Tribal level. Contractors conducing LBP activities in "target housing" and in "child occupied facilities" will be required to obtain training, receive certification, and follow the standards contained in the rule. This rule does not address work performed in public and commercial buildings, on steel structures, bridges, and other industrial facilities. EPA is currently evaluating the need to establish a training and certification program for individuals and firms working in these buildings. These regulations required Training Programs to be Accredited by March 1, 1999. Individuals could first apply for certification as of March 1, 1999 and must be certified by March 1, 2000.

1.b. Strategies to address regional priorities not fully addressed by base program - Improve screening and follow-up care for children at risk. See Children's Health for description of pilot efforts.

2. Geographic-specific strategies

a. Region 2 will conduct activities in the areas of high risk. This includes inspections and enforcement actions/complaints. According to New York State Department of Health maps which depict lead and its potential effects on the population, specifically children, priority areas include Buffalo, Niagra Falls, Rochester, Syracuse, Utica, Schenectady, Albany, Elmira, Binghamton, Newburgh and New York City.

b. An EPA Headquarters analysis which focused on determining the potential for housing to be contaminated (age of housing stock) with lead resulted in the identification of the following NY counties: Erie, Chautauqua, Niagara, Chemung, and St. Lawrence. NJ counties included Hudson, Essex, Cumberland, Camden, and Salem.

c. Educate the Public - Two such projects will take place in Camden and Syracuse. Both are high risk areas.

d. Support for State, Commonwealth and Territorial and Indian Nation watershed initiatives.

i. Work with NJ to develop state-specific data on lead and lead poisoning.

ii. Work with PR to develop state-specific data on lead and lead poisoning.

National Objective: Healthier Indoor Air

National result we intend to achieve By 2005, sixteen million more Americans (nationally) will live or work in homes, schools or office buildings with healthier indoor air than in 1994.

Regional Priority: Asbestos

Exposure to airborne asbestos, a known carcinogen, can lead to asbestos-related diseases such as asbestosis, lung cancer and mesothelioma. Airborne asbestos contamination in buildings is a significant environmental problem, and the extensive use of asbestos products in buildings raises concerns about exposure to asbestos in nonindustrial settings. These concerns are compounded further when we deal with asbestos contamination in schools where the health of children is at risk. Since asbestos-induced lung cancer usually has a latency period in excess of 20 years, asbestos exposure in children is of special concern. They have a greater remaining life than adults and their lifetime risk for developing mesothelioma are greater.

Recently asbestos-related operations at industrial facilities, such as limestone quarries, vermiculite ore processing facilities, and roofing manufacturers have become of significant concern. For instance, one roofing material manufacturer in New Jersey uses up to two million pounds of chrysotile asbestos powder annually in its process. There also exist in Region 2 limestone quarries where asbestos (tremolite) is found in seams with the ore and is released to the environment during the quarrying operation. Recently, vermiculite manufacturing facilities processing asbestos laden ore have also been investigated.

In Region 2, the Asbestos NESHAP (National Emissions Standards for Hazardous Air Pollutants) program and the Asbestos Hazard Emergency Response Act (AHERA) program, are mostly enforced by the EPA. The New Jersey Department of Health (NJDOH) has a minimal AHERA program which is funded through a grant from the EPA. NJDOH inspects the schools but does not take any enforcement. New York State has declined to accept the AHERA program and, therefore, the AHERA program in NY schools is entirely managed by Region 2. At the National Asbestos Conference in June 1999 it was stated that 95% of all school districts are out of compliance with the AHERA program.

For the asbestos NESHAP program, both states have limited, inspection-only type programs which are funded through EPA grants. The state's inspectors complete the inspections and refer all violations to the EPA. All asbestos NESHAP and AHERA related enforcement in New York and New Jersey is conducted by the EPA.

Identification of Cross-cutting Threats The asbestos threat is linked with indoor air quality in schools and large buildings under the Preventing Pollution section and it is also a children's health issue.

Program Strategies In order to minimize the exposure of children to asbestos, Region 2 is in the process of hiring a SEEP inspector for the AHERA program. The Region will try to extend its inspection coverage, especially for AHERA, beyond the New York City metropolitan area, however travel funds will be required for this to be successful.

To the extent possible threats to human health, caused by non-traditional sources of asbestos, i.e., limestone quarries containing seams of tremolite asbestos, vermiculite manufacturing operations, and roofing manufacturing operations, will be investigated.

In order to minimize exposure of the general population to asbestos fibers, the Region will attempt to convince the States (New York and New Jersey) to accept full-delegation of the asbestos program so that there is uniform enforcement of the program throughout the Region.

In the Caribbean, the Region will continue its oversight of the program implementation by Puerto Rico and the Virgin Islands.

Regional Priority: Asthma

Asthma, especially among children, is a serious current health problem in Region 2 and has gotten worse over time. The asthma problem in Region 2 urban areas, such as New York City, Newark and Camden, as well as in Puerto Rico, appears to be particularly severe. In 1995, the asthma hospitalization rate of New York City children was 2.8 times higher than the United States rate. Other data bases indicate levels significantly higher than the national average in Puerto Rico, and in Camden and Newark, New Jersey.

Asthma rates have risen nationally for the past several decades, in particular in the urban minority population, and this disturbing trend appears to be continuing. Asthma affects more than 15 million Americans, including almost five million children. While the ultimate cause of this rise is still unknown, it is certain that indoor environmental problems are one of the most significant contributors. Surveillance of asthma prevalence is done to some extent on a national basis by the Centers for Disease Control and Prevention (CDC). Regional and statewide data is far more difficult to get.

Identification of Cross-Cutting Threats Asthma is linked with other indoor air quality threats, such as Environmental Tobacco Smoke (ETS), indoor air quality in schools and large buildings, as well as being related to children's health and environmental justice.

Strategy The asthma program in Region 2 has funded and collaborated with cutting-edge efforts to mitigate indoor environmental factors which exacerbate asthma and may contribute to its causation.

1.a. Base Program Strategies: 1) Implement school and daycare based education, 2) Implement health care/HMO conferences, and 3) Implement in-home asthma education.

1.b. Strategies to address threats not fully addressed by base program: 1) Coordinate with ETS efforts; 2) Coordinate with Tools for Schools Program. The Region's program to reduce indoor air quality problems in schools has a strong asthma component.

2. Geographic Strategies: The Region will target specific geographic areas of concern in very high risk areas within the Region, such as the South Bronx and East Harlem in New York City, and Newark, New Jersey.

a. South Bronx projects. The Region supports the following actions: 1) an intervention project based at Montefiore Medical Center. Interventions involve determining baseline data on asthma triggers in the home as well as educating participating families on triggers and how to reduce them, 2) an intervention project based in Community Board 2, conducted by the New York State Department of Health, 3) development of community-based educational photo-literature for controlling asthma triggers, and 4) intervention projects being conducted by Einstein College of Medicine within the community.

b. East Harlem. The Region supports the following actions: intervention within New York City Housing Authority buildings, and additional In home environmental education for asthma.

c. Puerto Rico: The Region has funded an indoor environment study of the substances in tropical areas related to asthma. We have funded an intervention study that tests different asthma intervention methods (clinical and environmental) and also supporting the development and implementation of an island-wide Asthma Action Plan.

d. St. Regis Mohawk Tribe in Massena, New York. Study of allergen levels in homes.

3. Partnerships: The Region will continue to utilize partnerships with other groups. For example, the indoor air quality program (which encompasses the asthma issue) has always been a voluntary program and relied heavily on partnerships. The asthma program stresses the need to work through existing networks and organizations to educate the public. Partners such as the American Lung Association, American Academy of Pediatrics, state health departments, National Association of City and County Health Officials, and the Association of State and Territorial Health Officials all have state and local affiliates that have partnered with EPA on the asthma issue. These groups have built-in, established constituencies, and know what programs work best in reaching their audiences. Additionally because of the technical and in depth nature of our involvement in asthma, we have amassed a huge number of medical, research and community contacts within the Region.

Regional Priority: Dry Cleaning

Perchloroethylene (PERC) is an organic solvent of known human toxicity and a precursor to ground level ozone. Dry cleaners are the single largest users of PERC. As a result, an estimated 70,000 people in New York City are encountering PERC in their dwellings because they live above dry cleaning establishments. The location of dry cleaners in residential buildings is also of concern outside of New York City. Though there are state and federal dry cleaner regulations, the current compliance rate is approximately only 50 percent.

In Region 2 we have approximately 5,000 dry cleaners. More than 1,000 of these dry cleaners are located directly below apartments, and an additional 950 share a building with other businesses (such as eating establishments). The majority of the dry cleaners in the Region are small businesses owned by individuals who are not fluent in the English language and, therefore, have difficulty understanding environmental regulations. Region 2 has expended significant resources in providing compliance assistance to these facilities.

Identification of Cross Cutting Threats Dry cleaning is associated with contamination of drinking water due to improper handling, storage and disposal of used PERC. (See the groundwater and drinking water sections under the Clean and Safe Water goal.) Also see the air toxics and ozone sections under the Clean Air goal.

Strategies The Region will: 1) focus its future compliance assistance efforts in New Jersey and Puerto Rico, 2) continue its oversight of the implementation of the Maximum Achievable Control Technology (MACT) rules and concentrate its inspection and enforcement activities in those parts of the Region where significant non-compliance may occur, 3) improve its inventory of dry cleaners, and 4) work with New Jersey as they developing a General Permit for Dry Cleaners which will include the requirements of the MACT standard. This is scheduled for completion by the end of FY-2000.

Regional Priority: Environmental Tobacco Smoke (ETS)

A 1992 EPA report concluded that risks associated with ETS make it a Group A carcinogen, causing approximately 300 deaths per year in Region 2, which represents, based on population, 10% of the deaths associated with the national figure of 3000 deaths/year. The Public Health Service reported that smoking accounts for 87% of all lung cancer deaths, 82% of all deaths from chronic obstructive pulmonary disease, and 21% of all coronary heart disease deaths. ETS is also associated with impaired lung function in children. ETS results in increased risk of lower respiratory tract infections (150,000-300,000 cases) and an estimated 400,000 to 1 million asthmatic children have their condition worsened. Emerging studies have shown causal relationships between ETS and SIDS, lung and nasal cancer, leukemia, brain tumors, and lymphoma.

ETS is a combination of tobacco smoke exhaled by a smoker and the side stream smoke that is emitted into the environment between puffs of the tobacco product. It is chemically similar to the smoke inhaled by smokers containing thousands of chemical compounds including: nicotine, polycyclic aromatic hydrocarbons, benzene, carbon monoxide, nitrogen oxides and polonium-210.

Identification of Cross-Cutting Threats The threat of ETS is associated with the threats of asthma under the goal of Preventing Pollution and Reducing Risk, as well as the themes of children's health and environmental justice.

National result we intend to achieve By 2005, the proportion of households in which children 6 and under are regularly exposed to smoking will be reduced from 27 percent in 1994 to 15 percent.

Strategy Reduction of home ETS exposures to children is the top priority, particularly in urban settings in Region 2 where smoking rates tend to be higher. Identifying and establishing partnerships with existing health networks (such as the Center for Disease Control's (CDC's) Office of Smoking and Health Network, pediatrician groups, and community-based health organizations) to help reduce childhood exposures will also be a top priority. These groups have built-in, established constituencies, and know what programs work best in reaching their audiences. Region 2 will provide grants to organizations that are working on projects whose aim is to reduce childhood exposure to second hand smoke.

Regional Priority: Indoor Air Quality in Schools and Large Buildings

Indoor air quality conditions in schools across the country have steadily declined due to the aging of facilities and equipment. Dramatic increases in childhood asthma have also been shown to be related to poor indoor air quality in schools. Region 2 has received data from 50 schools which show that 75 percent have indoor air quality problems. Americans spend 90 percent of their time indoors, primarily at home or in the workplace; thus, an increasing amount emphasis is being placed on environmental conditions inside buildings. Indoor air quality in schools is influenced by a number of factors including: ventilation; Heating, Ventilation and Air Conditioning (HVAC) systems; operations and maintenance; products and furnishings; space utilization and occupant activity. Consequently, a wide variety of pollutant sources and pathways exist in these settings. "Tightening" of buildings over the years to reduce energy loss and minimize air handling costs and the increase in synthetic materials has further contributed to poor indoor air quality. There is a strong link between absenteeism related to indoor air quality problems and associated health impacts (such as asthma). If children and staff are being negatively impacted by an indoor air quality issue in the school such that they must miss school days, this has an impact both on productivity and learning. For Region 2, areas where asthma rates are exceedingly high, including New York City, Newark, and Camden, also have school buildings with severe indoor air quality issues.

Identification of Cross-Cutting Threats The threat of indoor air quality problems in schools and large buildings is associated with other threats, such as environmental tobacco smoke, and asthma as well as with children's health and environmental justice.

National results we intend to achieve Five percent of office buildings and fifteen percent of schools will be managed with good indoor air quality practices consistent with EPA guidance.

Strategy

1. Base Program Strategies: Through implementation of an "Incentives Program" get schools to use EPA's indoor air quality Tools for Schools Kit. The Tools for Schools Kit contains a set of activities that, when performed, will lead to improved air quality in the school. It is designed to help school staff help themselves. This is a school-based program, meaning the kit is designed to be "do-it-yourself." But it is also a voluntary program, so a great deal of EPA oversight and support is needed for the program to be successful.

2. Geographic Strategies: Region 2 will target certain geographic locations, including schools in low income urban areas, which often tend to have high percentage minority populations, and provide technical support in these geographic locations. Our pilot school program is focusing on New York City. By the year 2005 we are committed to implement the indoor air quality Tools for Schools Program in most of the 1200 New York City Schools. Trenton, Long Island, and the greater Buffalo area are also places where our program is currently focusing.

3. Partnerships: We will continue to establish partnerships to achieve our goals in these voluntary programs. The schools program has developed a large network of its own Region-specific contacts, such as the New York City Board of Education, New Jersey Association of School Business Officials, New York Board of Continuing Educational Services, and Committees for Occupational Safety and Health.

Regional Priority: Indoor Radon

The National Academy of Science in its report "Background Effects of Ionizing Radiation" estimated that 17,000 annual deaths occur due to exposure to Radon. Based on the population of Region 2 we estimate that more than 1,700 people die annually from radon exposure in Region 2, with the majority being in New York and New Jersey where indoor levels are the highest. To significantly reduce indoor radon risk, a homeowner must test for indoor radon and, if the home exceeds EPA's action guide, it should receive mitigation. In areas of the highest risk a low percentage of homes have been tested and, of those found with elevated levels, a low percentage have been mitigated.

Radon is a colorless and odorless inert gas that is formed by the radioactive decay of Radium-226 contained in the soil under and adjacent to a home [building]. The gas then collects in a house, especially under closed house conditions. Indoor radon exposure is the second leading cause of lung cancer based on studies performed by the National Academy of Science, which provided a central estimate of 17,000 deaths per year. The Regional estimate is 10% of that total. EPA's guidance level of 4 picocuries per liter (pCi/l) in living space is a technologically based rather than a health based recommendation. Almost all homes can be lowered to below 4pCi/l, while perhaps only 80% can be reduced to 2pCi/l. The lifetime risk from exposure at the guidance level is about 2×10^{-3} for nonsmokers and 2.9×10^{-2} for smokers. Since risk reduction requires individual action, a continuing program of outreach activities is necessary to encourage homeowner testing and mitigation. New homes should be built with radon reduction techniques to lower initial levels and make mitigation easier and more effective if it is necessary.

Both New York and New Jersey have large databases and geological models which have been used to categorize radon on a town by town basis. New Jersey's database is stronger as it is based on mandatory reporting of testing and mitigation. This direct tracking of testing and mitigation is far more reliable than the survey data obtained on a national basis. There is no widespread testing data for Puerto Rico or the Virgin Islands. A USGS evaluation labeled a few areas of Puerto Rico as having moderate potential for elevated radon levels; however, since housing stock in Puerto Rico and the Virgin Islands tend to be naturally ventilated due to climatological conditions, indoor radon exposure is expected to be less of a threat. Puerto Rico and the Virgin Islands have chosen not to take grant funds to develop a radon program.

Identification of Cross-Cutting Threats Radon is also a contaminant of concern in drinking water. Under the Safe Drinking Water Act standards have been proposed which would allow States and Water Suppliers to meet an Alternate Maximum Contaminant Level for radon if they enact Multimedia Mitigation Programs to reduce radon risk overall. Such mitigation programs would reduce the overall risk from exposure through both the air and drinking water pathway.

National result we intend to achieve By 2005, 700,000 homes with high radon levels will be mitigated; and one million homes will be built with radon-resistant construction.

Strategy

1. a. Base Program Strategies: The Region will continue to foster State Radon Program development through the State Indoor Radon Grants (SIRG) program. New York and New Jersey have used these awards to develop strong programs which address the Agency priorities: 1) Getting new homes built radon resistant; 2) Getting quality disclosure, testing and mitigation in conjunction with transfers of real estate; 3) Developing Coalitions that work in partnership with local governments, partner affiliates and other radon risk reduction leaders; 4) Testing for, and where necessary mitigating radon in schools; 5) Setting environmental result targets in four areas: testing, mitigation, radon resistant new homes and awareness (optional); 6) Innovative activities which achieve measurable results in radon awareness, testing, mitigation and radon resistant new construction.

1.b. Strategies to address regional priorities not fully addressed by base program: Under the Safe Drinking Water Act, the Region will continue to support the states in developing Multimedia Mitigation Programs. We believe that they will provide far greater risk reduction from radon overall.

2. Geographic Strategies: Both states have prioritized the risk from radon to their communities at a municipality level and are targeting their highest risk areas first. EPA supports this policy through development of SIRG projects.

3. Partnerships: The federal radon program is a strictly voluntary program and as such has always relied on partnerships, first with our states and then through a large network of national and local partners. Examples of the network of partners are groups like the American Lung Association and the National Association of Counties who have local affiliates who can work to meet radon priorities. The radon industry, real estate professionals (agents, attorneys, home inspectors, lenders), builders, building code officials, the media, etc. are all involved directly or indirectly with either EPA or the States in trying to get radon risk reduction.

National Objective: Improve Pollution Prevention Strategies, Tools, Approaches

Regional Priority: Pollution Prevention

Our goal is to further promote pollution prevention (P2) as the preferred approach to environmental protection in New

York, New Jersey, Puerto Rico and the Virgin Islands. By reducing amounts of chemicals managed at facilities, we address the national goals, objectives and subobjectives for pollution prevention because an inference can be made that facilities are making those reductions through adoption of pollution prevention principles, chemical substitutions, process modifications, or cleaner technologies. P2 is a vehicle for reinventing traditional Agency programs and devising innovative alternative strategies to protect public health and the environment. It is a key element of new EPA initiatives to protect children's health, to promote environmental justice and urban environmental quality, to empower state and tribal programs, to encourage corporate eco-efficiency and to preserve ecosystems.

At EPA, pollution prevention means source reduction -- preventing or reducing waste where it originates, at the source -- including practices that conserve natural resources by reducing or eliminating pollutants through increased efficiency in the use of raw materials, energy, water, and land. It is by nature a cross/multimedia issue. Since the inception of the Pollution Prevention Act of 1990, EPA has institutionalized prevention approaches into all of its mainstream activities, including regulations, permitting, technical assistance, compliance and enforcement.

National results we intend to achieve 1) By 2005, reduce by 20 % (from 1992 levels) the quantity of TRI toxic pollutants released, disposed of, treated, or combusted for energy recovery (half of this reduction will be achieved through source reduction); 2) by 2005, EPA and its partners will; a) divert 35% of municipal solid waste from landfilling and combustion, and b) facilitate source reduction to reduce per capita generation of municipal solid waste to 4.3 lbs/day; 3) promote use of P2 for meeting environmental goals by purchase of environmentally preferable products, increasing adoption of environmentally protective business products, increasing integration of P2 into EPA programs, and reducing the generation of pollutants by facilities.

Strategy EPA Region 2 will continue to advance P2 internally by incorporating cost-effective P2 alternatives into regulations and activities. P2 will also be advanced outside the Agency voluntary partnerships with industry, government agencies and citizen organizations, through technical assistance to businesses, and by funding demonstration projects.

Key Actions:

A. Integrate P2 into Region 2's activities and core programs. Core programs include air, water, waste, pesticides, toxics, compliance assistance and enforcement.

1) Establish a regional P2 workgroup to improve coordination and collaboration among regional P2 activities (including waste minimization and compliance assistance activities), better leverage limited resources and avoid duplication of effort;
2) Adopt a Pollution Prevention Vision Statement for the Region and develop specific P2 actions for each core program;

3) Work with the core media programs to develop measurable goals for P2 activities and identify indicators for measuring success of P2;

4) Incorporate P2 language in new air, waste and water permits, and policies;

5) Introduce or expand P2 language in base program Memorandums of Agreement (MOAs) with Headquarters;

6) Incorporate a P2 component into all grant work plans;

7) Promote P2 educational and training resources through employee awareness training, P2 Week activities and Region 2's P2 web site. Examples to integrate P2 include:

Air Program
- encourage P2 in reducing HAP chemicals also covered under the Agency PBT Initiative;
- reduce particulate matter in environmental justice areas (an Environmental Justice Through Pollution Prevention (EJP2) grant is already working to promote alternative fuel sources in the Bronx);
- reduce nitrogen oxide (NOx) emissions through the Energy Star and ClimateWi$e programs; and
- prevent indoor air pollution (an EJP2 grant is already working to prevent indoor air pollution in schools).

Water Program
- help prevent mercury , and other persistent, bioaccumulative and toxic (PBT) chemicals, from entering drinking water supplies;
- prevent pesticide runoff from agricultural practices;
- employ integrated pest management (IPM) practices; and
- prevent industrial discharges of dioxins/furans, PCBs, PAHs, pesticides and heavy metals (this is also covered under PBT work).

Waste Program
- promote P2 in preventing releases from hazardous and non-hazardous waste management facilities (such as through the WasteWi$e program);
- work with the RCRA permit program to include P2 in new permits for large regional emission sources;
- use Toxic Release Inventory (TRI)/Biennial Reporting System (BRS) data to identify additional facilities;
- focus on mercury emissions from medical waste combustion facilities and coal-fired power plants;

Compliance Assistance and Enforcement Program
- provide P2 industry-specific training to EPA inspectors and compliance assistance providers (printers, dry cleaning, automotive, universities, etc.);
- incorporate P2 into enforcement and compliance assistance checklists, compliance assistance informational packages and seminars/workshops; and
- include P2 Supplemental Environmental Projects (SEPs) and Environmental Management Systems (EMS) in settlement agreements.

B. Promote P2 among States, Tribes and Federal Agencies in Region 2.

Coordination Activities

1) Establish an annual regional roundtable meeting to improve coordination among state and local government P2 programs;

2) Continue to participate in the Northeast Waste Management Officials' Association (NEWMOA) P2 Roundtable meetings and EPA Headquarter and National Pollution Prevention Roundtable (NPPR) Meetings;

3) Integrate P2 into state regulatory programs through active involvement in state Performance Partnership Agreement (PPA)/Performance Partnership Grant (PPG) negotiations;

4) Improve coordination and collaboration among P2 assistance providers through participation in NEWMOA's Pollution Prevention Resource Exchange (P2Rx) Center and creation of a new Caribbean Basin P2Rx Center;

5) Make P2 technical assistance and educational resources available to specific industry sectors, through support of the New York State Department of Environmental Conservation (NYSDEC), New Jersey Institute of Technology (NJIT), the NEWMOA and Caribbean Basin P2Rx Centers and linking states and tribes to Region 2's P2 web site.

Promotional and Support Activities
1) Continue to administer the Pollution Prevention Incentives for States (PPIS) and EJP2 grants and P2 support funds (includes utilizing the P2 GranTrack system), while increasing publicity for the programs and the recipients;

2) Promote P2 tools, such as Design for the Environment, to targeted industrial sectors (including metal finishing, printing, garment care and auto repair), through industry-specific training for state and local inspectors and compliance assistance providers and P2 Week activities;

3) Promote voluntary partnership programs such as the Energy Star, ClimateWi$e, WasteWi$e and Pesticide Environmental Stewardship Programs (PESP);

4) Coordinate with Agency Re-invention activities;

5) Support Region 2 PBT activities (including regulatory/non-regulatory actions, P2 strategies and assistance, permitting, compliance assistance/enforcement activities, and voluntary programs) in the following sectors: healthcare, universities, electronics and pharmaceuticals;

6) Work with the healthcare industry to specifically advance the goals of the EPA/American Hospital Association (AHA) Memorandum of Understanding (MOU);

7) Identify and target additional PBT chemicals and sectors of concern to Region 2 through TRI/BRS analysis as well as Agency priorities;

8) Support tribal P2 program capacity building, beginning with a waste reduction in casinos workshop for the entire Iroquois Confederacy;

9) Integrate P2 into tribal regulatory programs through active involvement in Indian Nation/ EPA Agreements (TEA) development;

10) Encourage Indian Nation environmental programs to apply for P2 project grants (PPIS and EJP2);

11) Promote P2 in other Federal Agencies residing within the Region, through the Federal Facilities Program, the P2 State Department of Defense/EPA partnerships in New York and New Jersey and the Environmentally Preferable Purchasing (EPP) Program.

C. Educate citizens about the importance of and opportunities for P2.
1) Develop a general P2 brochure and a booklet summarizing past and ongoing Region 2 projects;
2) Conduct outreach through P2 Week activities, local events and conferences, and coordination with Region 2's

environmental education program;
3) Add a "P2 for You" page to Region 2's P2 web site.

National Goal: Reduce Global and Cross-border Environmental Risk

Regional Priority: Persistent, Bioaccumulative, and Toxic (PBT) Pollutants

Persistent, Bioaccumulative, and Toxic (PBT) pollutants (especially mercury, PCBs, and dioxin, but including lead, and certain pesticides) pose risks because they are toxic, persist in ecosystems, and accumulate in fish and up the food chain. PBT's have the ability to travel long distances, to transfer easily between air, water, and land, and to linger for generations. The fetus and child are especially vulnerable making this a critical children's health issue. Due to the number of adverse health and ecological effects linked to PBT pollutants, especially mercury, PCBs, and dioxin, it is an Agency priority to reduce PBT use and release.

For most of the PBTs mentioned, it is premature at this time to describe the supporting and therefore, any subsequent data analysis since the national program offices continue to identify PBTs and are in the initial stages of data gathering. The exception to this is mercury. The Agency's Persistent, Bioaccumulative and Toxic workgroup have developed a draft action plan for mercury.

National results we intend to achieve By 2005, EPA will utilize multiple tools to reduce use and release of priority PBTs by preventing the entry of new PBTs into commerce; achieve through voluntary efforts a net reduction of 50 percent (from 1991 levels) in the volume of priority PBTs in hazardous waste streams; and reduce by 50 percent from 1990 levels releases of mercury to air nationwide and to water within the Great Lakes Basin.

Strategy

1. **Mercury** In 1998 the EPA, through OPPTS, signed an MOU with the American Hospital Association to virtually eliminate mercury containing waste generated by hospitals by the year 2005. The Region has established a focus group to investigate ways that the MOU could be implemented within Region 2. The first focus group meeting was held in December 1999. The target state is New York. It is hoped that a plan can be finalized in FY00 and implemented in FY01. Region 2 could also focus on ensuring the other sources of mercury are in compliance with all applicable environmental laws. These include utility boilers, coal, and municipal waste combustors. Other sources are chlorine production, hazardous waste incinerator, chemical manufacturing not subject to chlorine production MACT, and portland cement. If violations are discovered, the SEP policy could be consulted to determine if SEPs could be proposed which reduce the amount of mercury produced/released.

2. Geographic-specific PBT strategies

EPA Region 2 is working with the New York Academy of Sciences (NYAS) through a cooperative agreement on an Industrial Ecology project for the NY/NJ harbor. The NYAS has initiated a five-year project to define and promote pollution prevention strategies for the Harbor using the tool of Industrial Ecology (IE). Industrial Ecology (IE) seeks to understand the transformations and flows of materials and energy in the local, regional and global economies and to use this understanding to promote sustainable policies and practices in the public and private sectors. Instead of controlling pollutants from different sources one by one at different times and with different technologies, IE looks across the entire materials cycle to identify areas where significant, across-the-board reductions are possible. It can focus on specific materials (e.g., mercury), products (e.g., dental amalgams), industries (e.g., power plants or chemical plants) and/or geographic areas (e.g., New York/New Jersey Harbor or the United States). It offers a means of addressing environmental, political and economic concerns – an absolute necessity if we are to successfully and

equitably engage all aspects of society in the effective stewardship of our environment. IE is a "systems" approach to pollution prevention and the assessment of toxicants.

The approach being employed by the NYAS emphasizes outreach and communication by establishing a Consortium of stakeholder institutions from the entire Hudson watershed. The project goals for the Consortium include: 1) identification of the locations in five selected toxicant (Mercury, Cadmium, PAHs, PCBs, Copper - toxicants are subject to change) cycles where pollution prevention would most efficiently contribute to long-term reductions in loadings, 2) working with all Consortium members and their stakeholders to get buy-in and encourage implementation of the most practical pollution prevention strategies to reduce toxicants, and 3) quantitative evaluation of the success of these strategies in achieving environmental outcomes

The NYAS project has so far funded the development of three research papers on Mercury related to cycling, sources and impact and is developing a mass balance for mercury in the harbor area.

BETTER WASTE MANAGEMENT,
RESTORATION OF CONTAMINATED WASTE SITES,
AND EMERGENCY RESPONSE

National Goal: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response
National Objective: Reduce or Control Risks to Human Health

Regional Priority: Cleanup of Underground Storage Tanks

The Underground Storage Tank (UST) program is designed to build strong State and local release prevention and corrective action programs to ensure that regulated USTs no longer present a human health or environmental problem. Leaking underground storage tanks (LUST) have been a significant source of ground water contamination for many years. Since 1988, State UST programs have reported more than 385,000 releases to the US EPA's Office of Underground Storage Tanks.

National result we intend to achieve By 2005, cleanup of 370,000 leaking UST sites will be completed or initiated under the supervision of EPA and its state or tribal partners.

Strategy Region 2 will support and augment state programs to ensure ongoing compliance with Underground Storage Tank (UST) regulatory requirements. Region 2 will conduct compliance inspections and enforcement activities to promote compliance with all UST requirements and will actively participate in priority activities such as Environmental Justice, Brownfields, Children's Health Initiatives, Geographic Initiatives, Wellhead Protection Initiatives and other Regional Priority Initiatives.

1) Region 2 will assist its regional states in addressing the impact of methyl tertiary butyl ether (MTBE) on drinking water systems for both public/private wells through the assessment and management of MTBE impacted Leaking Underground Storage Tanks (LUST) sites both with respect to site assessment and cleanup. Region 2 is encouraging its regional states to adopt Site Conception Model (SCM) focusing on sources, pathways and receptors to address MTBE impacted sites. This can be considered a parallel shift from Risk Based Corrective Action. The Driving force behind MTBE contamination is the nature of the chemical and its impact on drinking water aquifers. It is not necessarily health effects but odor and taste of the chemical at very low concentrations that fouls the drinking water. This adds a whole new dimension on how one responds to MTBE impacted sites. Region 2 plans on working with its regional states on integrating MTBE management with Geographic Information System (GIS) and geographic initiatives and conducting enforcement activities to ensure compliance with approved corrective action plans.

2) Region 2 will assist states to reduce the number of sites at which corrective action has not been completed. To reduce the gap between confirmed releases, cleanups initiated and cleanups completed.

3) Region 2 will assist its regional states in addressing orphaned /abandoned sites resulting from UST regulatory requirements. Through the Brownfields for Abandoned Sites Initiative, states need to deal with the potentially large number of sites that will be abandoned with the enforcement of the 1998 deadline. This problem will be particularly difficult to deal with in those states where the state fund is ending or there is no state fund. The ability to pay for remediation of releases at these sites will be reduced. The UST Program will work with States and Brownfields Coordinators in identifying areas where pilot projects can be implemented using LUST Trust fund funding.

4) Region 2 will promote UST compliance and corrective action efforts in Indian Country through a comprehensive UST

Program in Indian Country.

5) Region 2 will assist states to evaluate the effectiveness of UST systems - especially leak detection, cathodic protection and tank lining to ensure that they are operating properly to detect leaks faster and thus minimize contamination.

Regional Priority: Respond to Superfund Hazardous Waste Sites

Poor hazardous waste disposal practices in the past have resulted in the existence of numerous sites which now pose threats to human health and the environment. Through the Superfund Program, EPA screens suspected hazardous waste sites to determine the extent and type of action necessary. These actions include site inspection and ranking to establish the potential threat to human health or the environment, the immediate removal of leaking drums or toxic materials from abandoned facilities, and long-term cleanup actions at highly complex contaminated sites. These sites are responsible for contamination of soils, sediment, ground water and surface water. Contaminants at the sites include: volatile organic chemicals, semi-volatile organic chemicals, inorganic's, and radio-nuclide wastes.

National results we intend to achieve By 2005, EPA and its partners will reduce the risks that Superfund sites pose to public health and the environment by: completing construction at a total of 1,105 National Priorities List sites (National total), and determining if Superfund cleanup is needed at 85 percent of sites entered into the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS).

Strategy

Base Program Strategies

1) The basic long-term priority of the Superfund program is to identify instances of threat to human health and the environment, determine appropriate response actions, and eliminate or manage risks at an acceptable level. This ultimately, for the most complex and difficult sites, leads to final construction at National Priorities List (NPL) sites and deletion of sites from the NPL if all cleanup activity has been completed including any long-term remedial actions. Other sites may be cleaned up by state programs, removal activities, voluntary cleanups, etc.

Region 2 Priorities and Geographic Strategies

1) Site Assessment Program Strategic Priorities - a) Develop a strategy for an active site discovery program that focuses hazardous substances releases related to specific industries. For example, under a cooperative agreement with Region 2, the State of New York has identified former coal gasification facilities that will be assessed as a group. This approach takes advantage of the fact that these facilities are expected to have similar contaminants, are located in similar areas, and therefore have the potential for posing similar threats. Additionally, EPA has identified other industries of concern where a similar approach will be employed: wood preserving facilities, airports and shipyards; chemical manufacturing plants; and, military installations.

The strategy will utilize GIS Analysis and will include Geographic/Media Specific Special Initiatives that focuses on: Sediment sites; Sediment monitoring programs; a watershed approach that identifies groundwater contaminant sites and their potential threat to sole source aquifers and wellhead protection zones; and, private well areas. For example, Region 2 will coordinate with the New Jersey Department of Environmental Protection (NJDEP) initiative on pre-CERCLIS screening of groundwater plumes. The strategy will include development of EPA program liaison; dedicated staff assigned to interact across EPA programs; increased coordination on Multimedia inspections; and Environmental Justice support. There will be a GIS planning effort that focuses on area wide assessment.

b) Recent changes in the tax laws in Puerto Rico may cause a number of facilities to close and there is the possibility that they will be abandoned. Region 2 will develop a strategy to identify these facilities and conduct Superfund inspections/investigations to determine needs for remediation.

c) New site assessment initiatives will be developed for other Puerto Rico and Virgin Islands sites. In addition, there is expected to be an increased Superfund site assessment activity associated with formally utilized defense sites (FUDS) in which Region 2 will be active.

2) Sediment Site Strategy - a) 2000-2001 Priorities - Contaminated sediments in some of the Region's major river systems including the Upper Hudson, Passaic, Niagara and Grasse Rivers are currently being addressed through the Superfund program. Region 2 Superfund will continue to implement studies or remedial actions at these sites.

b) Region 2 will develop a Passaic River comprehensive strategy for dealing with the complicated technical enforcement, and coordination issues surrounding this contaminated sediment site. The strategy will be the model used for other Superfund sites with contaminated sediments and will include processes for intra- and interagency coordination.

c) Focus on the 12 National Sediment Inventory (NSI) watersheds and 8 specified highly contaminated waterways in the national plan. Conduct an active Superfund Site Discovery of Potential Sediment Sites within the focus areas. Especially consider: surface water drinking intakes; fisheries; and HRS sensitive environments in Region 2 (sensitive environments are defined in 40 Code of Federal Regulations (CFR) Part 300). Expand efforts to work with State partners to focus Site Assessment activities in the identified priority areas. Prioritize and review of the river reaches for which there is limited data, but a high likelihood of gross contamination.

d) Assess on a case by case basis remediation of releases from particular Sites, as well as whether a sediment area should be listed as a separate Site. There are some contaminated sediment areas that may score as NPL sites. These have potential for significant human health or environmental impacts.

e) Actively participate in the Source Track down for toxics, identified in the water program's Management Plans. Emphasize cross program coordination to identify Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or Resource Conservation and Recovery Act (RCRA) sites that may be significantly contributing to the sediment problems.

3) Contaminated Ground Water Site Strategy - Assessment of known and or suspected contaminated sites to determine if expedited action is needed to prevent aquifer contamination. Consideration of NPL listing as well as potential remedial or removal authority is needed with focus given in areas of "vulnerable" ground-water areas.

a) Improve data sharing between agencies to enable the development of comprehensive GIS database for Region 2. Include locations of private water drinking water supply wells, New Jersey's Classification Exemption Areas, Well Field Protection Areas, and permitted monitoring, industrial and agricultural wells. This information can then be used to identify "vulnerable" ground-water areas on a regional basis.

b) Develop a regional ground-water database that will tie into the EPA's GIS. Include information obtained from assessment and remediation documents prepared for Superfund, federal and state/territory projects.

c) Standardize all reporting data in order to facilitate the evaluation of activities on the environment. All programs should develop similar data submission requirements in order to enter the results in GIS and allow for a multi program assessment of environmental conditions and trends. Institute a requirement for data submission in electronic format specified by the Agency to best promote integration of electronic data bases.

d) Increase environmental site assessment, enforcement and education activities in the Carribean to protect groundwater resources.

4) Coordination of Waste Cleanup Programs with States - Region 2 will, as appropriate, host joint waste program meetings with EPA and interested Region 2 States, the Commonwealth of Puerto Rico, and/or the Virgin Islands to achieve the following goals: improve communication and coordination; and, discuss cross-program issues with key EPA and State/Commonwealth/Territory personnel.

a) As appropriate, meet within Region 2 to discuss issues of waste program consistency. This will involve management and staff from all affected programs (Superfund and Brownfields, RCRA, UST, LUST, ORC).

b) Assess the interest of program managers in New Jersey, New York, Puerto Rico, and the Virgin Islands to participate in separate or joint meetings focused on issues of waste program coordination. For those states or territories with an interest schedule a Region2/State/Commonwealth/Territory Waste Program Consistency Meeting.

c) Based upon the results of Waste Program Consistency Meetings evaluate any action items that can be taken to improve communication and coordination or identify methods to resolve cross program issues that impede environmental cleanup at Region 2 waste sites.

Superfund Enforcement

The Region will pursue using non-NPL enforcement tools at lower priority sites that have preliminary HRS scores above 28.5, but are not considered high national priority sites requiring Superfund remedial management. These sites may still present a potential threat to human health or the environment and Region 2 will reach out to responsible parties or potential developers who may wish to undertake response actions to mitigate the hazardous conditions identified during the environmental assessments. At these sites, where such an approach would be a better use of resources, Region 2 will negotiate and enforce an agreement to investigate the site. This will allow site cleanup and development to occur more quickly.

Through enforcement agreements, sites that may have a release or threat of release of hazardous substances will be cleaned up by eliminating actual or potential threats to human health and the environment. The initiative will be addressed by Site Assessment Managers in the Special Projects Branch as well as appropriate enforcement staff. Region 2 will pursue NPL proposal for sites where the responsible party is not willing to enter in a cleanup agreement with the Region or the State or Territory.

Regional Priority: High Priority Resource Conservation and Recovery Act (RCRA) Facilities

Many operating hazardous waste management facilities have past or on going releases to the environment that create the same environmental harm as inactive Superfund sites. Hazardous waste releases from past activities have resulted in contamination of air, groundwater, soil and surface waters. EPA estimates that over 4000 RCRA sites will require clean up costing 4-40 billion dollars.

In order to address the problems caused by these releases and avoid the need to expend government funds to remediate these sites, Congress passed the 1984 Hazardous and Solid Waste Amendments (HSWA). HSWA required all facilities that store, treat or dispose of hazardous waste to investigate and remediate all past and current releases of hazardous constituents to the environment. The primary vehicles for performing these corrective actions are the RCRA permit, 3008(h) order or equivalent state order.

National results we intend to achieve By 2005, human exposures will be controlled at 95% of RCRA High priority facilities and 70 % of these facilities will have toxic releases to groundwater controlled .

Strategy

Base Program Strategies

The basic long-term goal of the Resource Conservation and Recovery Act (RCRA) corrective action program is to implement stabilization measures at high priority facilities to prevent and minimize further releases and to complete final clean up actions. In order for the Region to strategically attack the major program priorities, the following environmental concerns will be considered:

1) Focus on RCRA facilities located in geographic areas identified by the Water Program as critical such as sole source aquifers, aquifer protection program areas, eco-sensitive watersheds, etc. The RCRA program will utilize a similar strategy discussed under the Superfund section of this document.

2) Focus on air releases from RCRA facilities that are located in impacted areas identified by the air program such as non attainment and ozone areas. Corrective actions will be taken to prevent further air releases from solid waste management units at these facilities.

3) Using a Regionally developed mapping system called the Quantitative Environmental Indicators of Contamination (QEIC), we are able to visually display site-specific groundwater and soil contamination at a number of high priority sites. This data can be overlain with geographic areas identified by the water and air programs to directly assess the contribution that RCRA facilities make to the environmental problems of the area.

4) Using US Census data, the RCRA program will identify those facilities that are located in areas that have relatively high asthma rates. These facilities will be assessed to ensure that releases are not adding to the health problems of local residents. See the Superfund portion of this report for more specific information.

5) Standardize all reporting data in order to facilitate the evaluation of our activities on the environment. Specifically, that RCRA program will work with our states to develop electronic data submittal requirements that can be directly entered into our QEIC and GIS systems and allow for a multi program assessment of environmental conditions and trends.

Regional Priority: Address Brownfields Properties

Brownfields are abandoned, idled, or under used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. EPA's Brownfields Initiative is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a

timely manner to prevent, assess, safely clean up, and sustainably reuse Brownfields.

National result we intend to achieve By 2005, EPA and its state, tribal and local partners will facilitate the redevelopment of 400 brownfields communities by providing technical and financial assistance.

Strategy

Superfund Program Brownfields Priorities

1) Effective Staffing: The Brownfields grant programs (Site Assessment, Revolving Loan Fund and Job Training) are fundamental to the success of the Brownfields Initiative and provide the entry point for EPA involvement in the redevelopment effort. The Region needs to ensure that sufficient resources are in place to support the existing grant programs, and also keep pace with this rapidly expanding initiative.

2) Insuring Progress: The Brownfields Initiative represents new and innovative approaches to solving environmental problems at Brownfields sites. Due to the innovative nature of the program, a strategy needs to be put in place that can continually monitor progress and anticipate any problems that may occur. Including staff in this process is critical, they are in the position to provide insights and observations on each Brownfields Pilot. The first objective in developing a strategy will be to have a Team retreat (scheduled for February 10, 2000) at which the team will identify and discuss critical areas and how to overcome them. A Brownfields Project Managers Guidance Manual will be developed that incorporates conclusions and recommendations from the retreat. The Brownfields team is also developing a project management data base, accessible on the LAN, that will allow the project managers to input information, and any authorized personnel to access that information. This will give an instant picture of program status that the team leader, Branch Chief, Grants Specialist, or anyone else critical to the program, can monitor to insure the program is progressing.

RCRA Program Brownfields Priorities

1) As closed and closing facilities move toward final clean up, the Region will identify a viable Brownfields candidate according to the criteria developed by the National Brownfields Workgroup and request that OSW consider the facility for a RCRA pilot study. The Region would promote the redevelopment of the pilot facility that would be used a national example of how RCRA can be an active participant in Brownfields.

2) The RCRA program will promote redevelopment by assisting the owner/operator of the facilities in identifying available Brownfields programs and funding sources. Such a measure is a direct indication of environmental benefit and is currently included in the New Jersey PPA. This measure will be expanded to New York and the Caribbean.

3) RCRA will coordinate with Superfund in developing measurements and ensuring progress. The RCRA program will also actively participate in the Brownfields 2000

National Objective: Prevent, Reduce and Respond to Releases, Spills, Accidents or Emergencies

Regional Priority: Reduce Annual Number of Confirmed Releases from USTs

The Underground Storage Tank (UST) regulatory requirements were phased-in over a period of ten years to minimize the financial burden of coming into compliance and to give owners and operators adequate time to come into compliance. As a result of the phased-in requirements and the multitude of activities involved in the implementation of a comprehensive UST program, both EPA and States instituted priority activities to promote leak detection and 1998 Upgrade requirements. The 1998 Upgrade requirements require all USTs to have spill, overfill and corrosion

protection by December 22, 1998 or close either temporarily or permanently. The average compliance rate of leak detection requirements for USTs in Region 2's states is about 75% while that of 1998 Upgrade requirements averages about 85%. These compliance rates vary widely within UST universe. For instance some UST sectors have documented compliance rates for 1998 requirements as high as 94% while some have as low as 15%.

The number of UST systems equipped to meet leak detection requirements 21,313 in the state of New York, 11,571 in state of New Jersey, 3,693 in the Commonwealth of Puerto Rico and 76 in the U.S. Virgin Islands. The number of UST systems equipped to meet the 1998 Upgrade requirements is 18,394 in the state of New York, 11,902 in the state of New Jersey, 3,896 in the Commonwealth of Puerto Rico and 76 in the U.S. Virgin Islands.

National result we intend to achieve By 2005, cleanup of 370,000 leaking UST sites will be completed or initiated under the supervision of EPA and its state or tribal partners.

Strategy

1) The UST priority is to ensure that all USTs comply with all the regulatory requirements.

2) Region 2 will focus activities on improving compliance rates with leak detection, spill, overfill and corrosion protection requirements for all UST.

3) Region 2 will evaluate the effectiveness of UST systems especially for leak detection and corrosion protection requirements to ensure that they operate properly. While EPA requires that all UST systems have leak detection and corrosion protection requirements, it is industry, manufacturer and nationally recognized associations (such as ASTM, API, NFPA, NACE International) that set the performance standards and criteria. While the UST systems were equipped for leak detection and corrosion requirements, there is growing concern that these systems do not meet the performance standards established by the manufacturer of the equipments or performance criteria established by nationally recognized associations.

4) Region 2 will support and augment state programs to ensure ongoing compliance with UST regulatory requirements. Region 2 will conduct compliance inspections and enforcement activities to promote compliance with all UST requirements and will actively participate in priority activities such as Environmental Justice, Brownfields, Children's Health Initiatives, Geographic Initiatives, Wellhead Protection Initiatives and other Regional Priority Initiatives.

5) Region 2 will continue compliance assistance initiatives with both it's regional states and owners and operators of UST systems.

6) Region 2 will continue to support program and regulatory development efforts, provide assistance for clean ups and coordinate our efforts with the Indian Nations.

Regional Priority: Reduce Community Risks from Chemical Accidents

Unidentified chemical risks pose a number of environmental threats to communities when accidents /spills result in a release.

National results we intend to achieve By 2005, of the facilities that have submitted risk management plans identifying their chemical risks and processes, 20% of those facilities that pose significant risk will have reduced their

potential of having a major chemical accident. Local communities will incorporate facility risk information into their emergency preparedness and community right-to-know programs.

Strategy

Reduction of Community Risks from Chemical Accidents

1) Emergency Planning and Community Right-to-Know (EPCRA) - Continue to sponsor regional training (CAMEO) using EPA contractor resources. Continue compliance assistance, inspections and enforcement actions for failure-to-notify of accidental chemical releases and failure to file annual chemical inventory forms. Continue to participate in regional multimedia inspections and national EPCRA initiatives. Continue to promote Supplemental Environmental Project (SEPs) as part of case settlement.

2) Risk Management Plans (RMPs) - As resources allow: Continue conducting inspections for failure to file RMPs in New York State (NY); provide requested assistance to delegated state programs in New Jersey (NJ), Puerto Rico (PR), and the Virgin Islands (VI); develop RMP desk and field audit capability; conduct audits when authorities are redelegated to Emergency and Remedial Response Division (ERRD); participate in development of national penalty policy; continue conducting accident investigations for enforcement of General Duty Clause (GDC); establish GDC enforcement process with the Office of Regional Counsel (ORC) and initiate GDC actions. Assuming little or no violations are identified, the FY00 plan for RMP enforcement is to transition from conducting RMP non filer inspections to initiating desk and field audits of RMP completeness and sufficiency. The first step is to develop the skills and procedures for conducting these audits. All Region 2 personnel and SEE staff involved with RMP enforcement will attend audit training scheduled for April 2000. Region 2 management will discuss RMP audit program implementation issues with regional counterparts and Headquarters in January 2000. The goal will be to develop a prioritization scheme to screen, desk audit, field audit all 239 RMPs submitted in NY within the 5 year RMP report time frame (RMPs must be resubmitted at least every 5 years).

Regional Priority: Oil Pollution Prevention, Preparedness and Response

The Region typically receives about 500 oil spill notifications each year, and conducts 10-12 emergency responses to oil spills. Oil spill removals, either fund lead or under an administrative order with a responsible party, range from none to as many as five (5) starts per year.

National results we intend to achieve By 2005, EPA and its partners will have the capability to successfully respond to 100 % of known emergency actions, chemical risks will be reduced at facilities submitting Risk Management Plans, we will increase the number of facilities acting upon our accident investigation recommendations: By 2005, 1) 7100 facilities will be in compliance with oil pollution prevention regulations and, therefore, better prepared to prevent oil spills, and the consequences of spills to environmentally and economically sensitive areas will be significantly lessened by pre spill contingency planning and 2) all significant oil spills in the inland zone will be responded to in an effective manner.

Strategy

1) Oil Spill Response and Removal - Oil spill response will be included in the upgrade of the overall emergency response program. All oil spill removals referred to Region 2 will be addressed. This will include both fund lead and responsible party clean ups.

2) Area Planning - Viable Area Contingency Plans for NY, NJ, VI and PR will be prepared and implemented by the

Region by the end of FY02. Caribbean: During FY00, Region 2 will work with the U.S. Coast Guard (USCG) and Caribbean Environmental Planning Division (CEPD) to combine the coastal and inland zones into one Area Plan. Island specific issues will be addressed through separate annexes to the Plan. New York: At the start of FY00, Region 2 is about half way through the Area Planning process for NY. Region 2 will continue to work with each of the eight inland New York State Department of Environmental Conservation (NYSDEC) regional offices and is expected to complete this process by the end of FY01. New Jersey: Region 2 will initiate Area Planning with NJ during FY01 and will complete the Area Plan in FY02

3) Facility Response Plans - The Region 2 goal is to review and approve all 300 facility response plans (FRPs) within the next five years. Changes to implementation of FRP program: during FY00, Region 2 will increase the number of staff responsible for FRPs from one to two through reassignment of responsibilities of existing staff. The current staff member will be responsible as the overall FRP Coordinator, and monitor the review of plans in NY and the Caribbean. The additional staff member will be responsible for monitoring the review of FRPs in NJ. In order to reduce the number of reviews needed to bring a FRP into compliance, Region 2 will develop an outreach seminar in FY00. Starting in FY01, this seminar will be offered to facilities and their consultants who will have their plans reviewed during the upcoming year. The seminar will focus on the weaknesses commonly found in most FRPs: the vulnerability analysis, hazard evaluation and exercising the plan. A more thorough inspection will also be piloted to examine facility response equipment, response capability and downstream natural resources vulnerable to an oil spill. Region 2 will also increase the use of unannounced drills at FRP facilities located in the inland zone [24 in NJ, 55 in NY, 3 in PR]. Four unannounced drills will be held in each state during FY00 as a pilot and Region 2 will discuss with USCG the possibility of jointly conducting unannounced drills at coastal facilities in the Caribbean. The Region will conduct unannounced exercises at all FRP facilities in the inland zone to verify response capabilities within the next five years. SPCC - Spill Prevention Control and Countermeasure (SPCC) inspection will be conducted at the same time as all FRP inspections. A schedule of FRP inspections will be provided to help decide which SPCC inspector will accompany the FRP inspector. The ultimate goal will be to grant FRP approval and SPCC compliance simultaneously.

4) SPCC - Region 2 will conduct 250 facility inspections and plan reviews each year during the next five years, with six inspectors. All inspections will be completed by July, in order to avoid disruption from Hurricane season.

5) Enforcement - The Region will continue to take enforcement actions on the worst offenders for SPCC, FRP and oil spill violations. Region 2 expects to continue to take five enforcement actions each year. In order to increase compliance assistance, during FY00, Region 2 will develop and then maintain a summary of press releases from prior enforcement actions and distribute these summaries during inspections at facilities. Enforcement actions will increase according to the following schedule: FY00: 6, FY01:8, FY02: 9, FY03 and beyond: 10.

Regional Priority: Prevent and Reduce Releases from Hazardous Waste Management Facilities

The RCRA permit program is designed to support the protection of human health and the environment by providing for the following conditions: **1)** Safer (reduced risk) hazardous waste handling and management and **2)** Conservation of energy and natural resources

The universe of RCRA hazardous waste treatment, storage and disposal facilities in Region 2 is 691 that includes 132 operating facilities, 557 closed or closing facilities and 2 proposed facilities. This represents approximately 6.7% of the total national RCRA universe.

In New York, there are 90 facilities with 69 operating and 21 closed or closing. In New Jersey, there are 306 facilities with 48 operating and 258 closed or closing. In Puerto Rico, there are 80 facilities with 16 operating and 64 closing or closed.

National result we intend to achieve By 2005, 80% of all facilities will be managed to prevent dangerous releases to air, soil and groundwater.

Strategy

Prevent and Reduce Releases from Hazardous Waste Management Facilities

The region has established the following RCRA permit priorities to ensure safe hazardous waste management and conservation of natural resources.

1) Ensure accountability by the regulated community through the issuance of RCRA permits, closure plan approvals and permit renewals that contain appropriate environmental safeguards. The RCRA permit universe is divided into facilities that land dispose, incinerate or otherwise store and treat hazardous waste. Of greatest environmental concern are the land disposal facilities that are closing followed by combustion and interim status facilities.

2) Promote waste minimization source reduction and recycling. This priority is being addressed by the Pollution Prevention Team.

3) An indication of the effectiveness of waste management at RCRA facilities is related to the number of accidental releases of hazardous waste. One measure that is currently reported is the activation of a facility's contingency and emergency response plan for such incidents. The Region will track this measure to determine if facilities managing hazardous waste are continually improving environmental safeguards.

4) Focus the issuance of RCRA permits, closure plan and financial assurance reviews and permit renewal activities on RCRA facilities located in critical geographic areas identified by the Water Program such as sole source aquifers, aquifer protection program areas, eco-sensitive watersheds, etc.

5) Using Toxic Release Inventory (TRI) and BRS data identify and focus permit activities on facilities that are among the largest emission sources. For those facilities that are also RCRA regulated, permit renewal activities will be addressed.

6) Much of the Region is currently in non attainment of the Clean Air Act (CAA) for ozone. RCRA facilities contribute to air pollution through the incomplete combustion of hazardous and solid waste and from fugitive and other emission from handling, treatment and disposal activities. Using GIS mapping , we will target permit activities at those facilities located in non attainment areas. Reduction in such releases would beneficially impact air quality near the facility as well as the Region.

7) RCRA Treatment Storage and Disposal facilities (TSDs) and generators located in areas identified above that manage large quantities of hazardous waste in on-site wastewater treatment plants and discharge to a Publicly Owned Treatment Works (POTW) or surface waters will be referred to the Water Program. These facilities may have air or water releases that should be assessed under the Water Permit.

RCRA Enforcement

Region 2 will support all Community Based Environmental Projects (CBEPs) selected by the Region that have

hazardous waste handlers that pose an adverse significant risk to the environment and public health. This will be done by targeting inspections in coordination with other media. RCRA is the lead for the Long Island initiative. Dry cleaners (10 inspections plus compliance assistance in Suffolk County) and electroplaters will be a special focus in terms of potential impact on Long Island sole source aquifer due to releases/impact from improper waste management. In addition, in the NYC Watershed area, Region 2 will conduct annual inspections at a rate of 10 inspections per year. Half of the Petroleum Refineries will continue to be inspected each year due to their large generator status and potential environmental/public health impacts that may result if these handlers are not given close scrutiny. Based on a foundation of outreach conducted in FY'96/97, air emission inspections will continue as part of all RCRA inspections as well as specifically targeted inspections using a Region 2 developed targeting protocol which has been shared with OECA and the other regions.

1) Permit Evaders-Electroplaters - An annual average of 30 inspections will be conducted at electroplaters that have not notified Region 2 that they generate any hazardous waste.

The focus will be on electroplaters located in Brooklyn, Queens, Long Island due to their being over a sole source aquifer. Facilities located in the New York City (NYC) Watershed will also be inspected due to potential impacts on the NYC drinking water supply; and electroplaters in potential Environmental Justice areas in NJ will also be inspected (e.g., Newark, Patterson).

2) Chemical Warehouses and Handlers in Newark and Paterson, N.J. - In order to ensure that chemical warehouses and facilities handling large amounts of chemicals are in compliance with RCRA and storing chemicals properly, a series of inspections will be conducted by an EPA Region 2 contractor. Based on these reports, Region 2 determines whether violations exist and enforcement is necessary or whether a follow-up inspection by an EPA inspector is warranted. Instances in which blatant non compliance is observed during a screening inspection will result in the immediate dispatch of an EPA inspector to the site. These inspections will be conducted in Newark, N.J. and Paterson, N.J. which are both Environmental Justice (EJ) areas, areas in which a number of problem facilities have been identified in recent years, and areas in which a high concentration of these types of facilities exist in conjunction with a large at risk population.

3) Control of Lead Releases from Steel Structure Maintenance - While the degree of non compliance has dropped significantly in the NYC area, Region 2 plans to conduct approximately 10 inspections per year in other urban/EJ areas where there are significant numbers of children at risk from this activity. The selection of inspection targets will be based on those cities in NY and NJ that have significant minority/low income populations and large populations of young children. Once these cities have been identified, we will then obtain information on those cities on the target list that will be conducting infrastructure maintenance work that could lead to the releases of lead into the environment. Enforcement will be taken against those releasing lead to the environment.

Region 2 will also provide ongoing compliance assistance to the regulated community by providing copies of the written best management practices protocol. Region 2 receives approximately ten phone calls per year requesting information on the best management practices it has determined appropriate to the external lead-based paint abatement industry.

4) Outdoor Firing Ranges - A) Compliance Assistance - Given the large number of outdoor firing ranges in the region and the limited resources to inspect them, the primary tool to address this problem will be compliance assistance. To address potential harm from lead shot and clay targets, the RCRA Compliance Branch has been developing a

compliance assistance program to familiarize range owners/operators with applicable environmental regulations and statutes, raise awareness of related environmental and public health concerns, promote redesign of ranges for lead and clay target collection, and demonstrate the benefits of remediation of lead from range soils. The centerpiece of this program is a document, "Best Management Practices for Outdoor Rifle, Pistol, Trap, Skeet, and Sporting Clay Ranges," which is being peer reviewed by industry and regulatory agency representatives and is scheduled for public release in the second quarter of Fiscal Year 2000. It will be followed by at least three seminars (two in New York and one in New Jersey) on the topics covered in the manual. B) Inspection and Enforcement - In Region 2, we expect to conduct at least ten inspections per year to evaluate the facilities' management practices and determine whether they are adequately protective of human health and the environment. The visits will also be used to provide compliance assistance via dissemination of the manual. Facilities will be selected based on citizen complaints, as well as proximity to drinking water sources (i.e., in watersheds), sole source aquifers, wetlands, private wells, sensitive receptors, or other sensitive ecosystems.

Where Region 2 believes that ranges may pose an imminent and substantial endangerment (i.e., real or potential harm), we will use RCRA Section 7003 authority to require the facility to mitigate the harm or risk. A soil and water sampling protocol has been established with the hazardous waste sampling program to gather site-specific contaminant data in the event that a site is found that the inspector believes may be a potential candidate for enforcement.

Regional Priority: Reduce Combustion Facilities Emissions

During the past few years, thermal combustors had been a priority for EPA. Poorly operated thermal combustors (hazardous waste incinerators, boilers or industrial furnaces) have the same or greater environmental/public health impacts due to their emissions. Many facilities stopped burning hazardous instead of upgrading their facilities to meet tightening requirements.

National results we intend to achieve Emissions of dioxins and furans, particulate matter, and acid rain gases from hazardous waste combustion facilities will be reduced by 90, 50 and 50 percent respectively from levels emitted in 1994.

Strategy

1) All the combustors in the Region will be inspected annually by either Federal or State inspectors. In the area of air emissions, each large quantity generator ("LQG") and Treatment, Storage, and Disposal Facility ("TSDF"), inspected by Federal and State inspectors, will be inspected for compliance with RCRA Air Emissions. This is expected to result in several hundred RCRA air emissions inspections per year. It is expected that all LQGs and TSDs will be inspected by 2003.

Regional Priority: Prevent and Reduce Releases from Non-hazardous Waste Facilities VI

The government of the U.S. Virgin Islands has indicated its intent to enter into a RCRA § 7003 Order on Consent to address solid and hazardous waste releases at the Bovoni Landfill on St. Thomas. The implications of the Order, which was issued in draft in October 1999, go beyond the Bovoni Landfill, in that there are other solid waste landfills in the Virgin Islands that are not operating in compliance with the RCRA Part 258 management standards for municipal solid waste landfills and are, therefore, posing an adverse risk to public health and the environment. Conditions at identified VI landfills have been greatly exacerbated by two recent hurricanes, to the extent that the Virgin Islands now faces a solid waste management crisis due to the lack of existing landfill capacity from the disposal of municipal trash,

household hazardous waste, used oil, spent lead-acid batteries, etc., at these landfills.

Strategy

1) At a minimum, Region 2 will oversee the implementation by the U.S.V.I. government of the terms of the (now draft) Bovini Landfill RCRA § 7003 Order on Consent. Even if the U.S.V.I. government Part 258 solid waste program is not denied, the Region may have to take enforcement under RCRA § 7003 to address issues at the Anguilla and Susannaberg landfills. Concurrently, the Region would work closely with the U.S.V.I. government to enable them to make the transition back to maintaining an autonomous solid waste program.

2) The Region will develop a strategy aimed at increasing waste management capability in the VI which will include: a) Inventory of the categories of waste problems not addressed by 7003 orders which may include household hazardous waste, Virgin island government generated waste, and other sources of waste including commercially generated waste, b) existing management practices and requirements, c) regulatory requirements, d) historic EPA involvement in this area, e) funding, and f) solutions including potential enforcement mechanisms. The strategy development will be a jointly coordinated effort with appropriate Region 2 inter-divisional representation in terms of planning and implementation.

Regional Priority: Prevent and Reduce Releases from Non-Hazardous Waste Facilities
Enhance Tribal Capacity

EPA has the responsibility to develop Tribal capacity to implement the RCRA solid waste program throughout Indian Country. An important tool to develop capacity involves worksharing agreements and other cooperative agreements with Tribal governments and Federal agencies (state and local as appropriate) in the context of government to government relations with Tribes.

Strategy

1. Open Dumps - The Region recognizes that open dumps continue to be one of the most visible manifestations of solid waste management concerns for Indian Nations. As such, we will continue to encourage baseline activities such as preparing a survey of open dump sites with grant funds to implement if necessary. After an inventory (or some type of location identification) has been prepared, the Region is ready to offer contractor assistance to arrange for an open dump characterization. The resulting document will completely describe the physical location and contents (which may contain hazardous waste) as well as provide estimates for removal. Following these steps, the Region will continue its commitment to meet regularly with other federal agencies such as Bureau of Indian Affairs and Indian Health Service to discuss ranking of sites and potential funding sources for open dump removal.

2. General Assistance Program - In Region 2, both the St. Regis Mohawk Tribe and the Seneca Nation of Indians have used the resources of the General Assistance Program Grants. This past year, the Haudenosaunee Environmental Task Force has also applied on behalf of the Tuscarora Nation, the Tonawanda Band of Indians, the Cayuga Nation, and the Onondaga Nation. We will coordinate the activities provided for under the GAP mechanism to enhance and extend the resources of the solid waste demonstration grant projects.

3. MSW Landfills on Indian Lands - Region 2 will continue to address providing technical assistance and capacity building through solid waste demonstration grants. Region 2 will continue to work with the St. Regis Mohawk Tribe

(SRMT) in the final year of their comprehensive solid waste program grant. The grant includes developing codes and regulations, creating a solid waste management plan so that the SRMT will be self-sufficient in its waste prevention and handling, and creating an education program that will be designed to be continuously delivered. Our follow up activities include direction and support for the SRMT to access available funding sources for construction expenses when applicable (e.g.HUD support for the waste transfer station to house a recycling and material exchange program).

The SRMT has also taken a leadership role through their grant to convene the Indian Nations in the Region to determine a hierarchy of solid waste concerns to be followed by technical assistance workshops to provide information to directly address those concerns. An important deliverable from this grant will be a workbook that will summarize all the information presented. We expect to follow the progress of this grant very actively and to assess this model of outreach.

4. Coordination - The Region expects to maintain an active outreach/meeting schedule. Both the program FTE as well as the Tribal Circuit Rider have established a schedule of face to face meetings with each Indian Nation as well as quarterly meetings with both the IHS and BIA. Most of the Indian Nations now visit in the regional office annually. Staff participates heavily in the Regional Indian Workgroup which discusses tribal issues in an integrated fashion and also arranges for formal Leaders' meetings annually.

Regional Priority: Prevent and Reduce Releases from Non-Hazardous Waste Facilities Control Municipal Waste

Municipal waste that is not properly disposed may cause releases of substances that will degrade air, surface and groundwater resources.

National result we intend to achieve By 2005, EPA and its partners will prevent dangerous releases to air, soil and groundwater at 100% of municipal solid waste facilities.

Strategy

1. Region 2 will actively participate in Regional and OSW efforts to improve the operation of waste transfer stations (WTS), particularly in the New York City metropolitan area. This includes, review and comment on City waste management planning documents; meetings with City and State officials concerning WTS concerns; outreach and technical support to community organizations; participation in the development of OSW's WTS "best practices manual" (BPM) and project management of the New York University (NYU) WTS - health effects study. We will continue to monitor other developments in the WTS arena including, New York City export contracts; Virginia's efforts to regulate waste imports and barge shipments; Elizabeth, New Jersey's concerns; NYSDEC's WTS enforcement sweep.

2. Region 2 has embarked upon applying subtitle D approaches to areas that have been traditionally identified as subtitle C areas. For example, through support of the GLOW program (Genessee, Livingston, Orleans, and Wyoming counties in New York State), we have gathered detailed baseline information about PBTs through the household hazardous collection.

3. Region 2 will be targeting reduction of heavy metals such as mercury in the hospital setting by fashioning a comprehensive outreach program under the umbrella of the MOU that we have with the American Hospital Association. The program will feature workshops to encourage reduction of municipal solid waste as well as heavy metals and reagents to be followed by reporting and tracking of reported results and recognition for participants.

4. The Region is committed to heightening awareness of the importance of reducing solid waste at the point of generation. To that end, we expect to focus on collecting and evaluating teaching materials that will help procurement officers in the public sector to incorporate source reduction practices into their guidelines and specifications.

Regional Priority: Federal Preparedness

EPA must maintain and enhance our preparedness to respond to nuclear, biological, and/or chemical terrorist events.

National result we intend to achieve By 2005, 50% of the nation's largest metropolitan areas (>1 million people) will have been trained and equipped to respond effectively to terrorist events that involve chemical, biological, or radiological agents.

Strategy Emergency Response Program - During FY00, the remaining tasks under the Core Emergency Response Program will be implemented including Regional backups, implement the delegation of the $200,000 On-Scene Coordinator (OSC) authority, implementation of bank card authority for specified staff and training of staff, and greater outreach to State/local government and the public. In addition, continued training of all emergency response staff in general emergency response/counter-terrorism responses and refinement of emergency response guidance for the OSCs will be a priority in FY00. The Region will also continue to look at areas such as planning and preparedness for emergency response that need continued upgrading. In the area of emergency response, we expect an average of about 50 responses for the year, with 10-15 being ones performed by after-hour standby duty officers.

In FY01-04, the emphasis on emergency response will be preparation for the worst case situations involving such incidents as counter-terrorism. Preparation for these types of incidents will involve training exercises with the United States Coast Guard (USCG), Atlantic Strike Team (USCG/AST), Superfund Technical Assistance Response Team (START) and State and local government. It will also involve offering to the OSCs advanced courses on biological, chemical and radiological agents to make sure that the Regional OSCs have the knowledge to handle the decision making process needed for these type of incidents. A decision may be made in these years, based on funding and other criteria, as to whether the region should continue to rely solely on START and the USCG/AST for Level A response capability or if EPA OSCs should have this capability. In these years it will also be a goal to respond consistently to all incidents that an EPA presence may be needed. This will involve the staff being highly prepared, trained and aggressive in their response to all emergency situations.

Children's Health

Everyday, children face environmental threats where they live, learn and play that affect their bodies in adverse ways. Children's body systems are still developing and are less able to metabolize, detoxify and excrete these pollutants when compared to adults. Children are not little adults, and they breathe more air, drink more water and eat more food pound for pound than adults. Our control activities will recognize these differences.

Goal Region 2 will undertake actions, beyond those implicit in our base programs, to identify, prevent and reduce environmental threats to children's health.

Strategy

1) Encourage and expand educational efforts with health care providers and environmental professionals.
2) Ensure that assessments done by the region are protective of any heightened risks faced by children.
3) Develop scientific work that is region specific focused on the gaps in knowledge regarding child-specific susceptibility and exposure to environmental pollution.
4) Expand the public information available to parents allowing families to make informed choices concerning environmental exposures to their children.
5) Seek to obtain the funding necessary to address children's environmental health as a top priority among relative health risks.

Key Actions

1. Implement activities that have been identified as priorities in reducing threats to children's health.
    a) Asthma - Expand our Asthma related projects region wide maintaining a balance of scientific and community outreach
    b) Lead -
        i) Build upon our Inner City School Administrators Summer Science Program by targeting New Jersey inner city school and preschool buildings where children are at high risk from lead poisoning. Work with the state to have these buildings prioritized for lead paint removal.
        ii) Develop a pilot enforcement program in the metro NYC area that strategically targets multifamily residential buildings where children are at high risk from lead paint. Referrals from Montefiore Lead Poisoning Center in the Bronx will be screened for potential enforcement actions. Follow up enforcement actions should reduce incidences of lead poisoning in targeted buildings.
    c) Implement Sunwise, a program that educates kids, their families and communities about the risks of overexposure to the sun. Analyze pilot results from NY and NJ. Focus program development in PR and the VI.
    d) Combination Approaches - Include multi program approaches wherever feasible (e.g., provide assistance with lead AND asthma)

2. Encourage and expand work with health care providers and environmental professionals
    a) Continue and expand Interagency working groups that partner on both lead and asthma
    b) Build and expand upon our work with managed care community
    c) Actively participate in the Presidents Interagency Task Force on Environmental Health for Health Care Providers

3. Utilize and develop analytical tools

a) Develop partnerships for children's data collection. Work with the new Health and Human Services Region 2 office of data to assist in designing an improved reporting system on children's health issues that will be useful to HHS and EPA. Work with the Centers for Disease Control and the states to utilize their reported data on a regional level.

b) Actively monitor the health of children in Region 2 by collecting existing data annually to look for trends.

c) Increase and build upon interaction of Children's workgroup members with the regional Science Advisory board .

4. Improve public information

a) Development of our web site

b) Develop strategy for outreach

Contaminated Sediments

Historical industrial activities together with current inputs such as combined sewer overflows, leachate from landfills, pesticide use, illegal discharges, spills, and atmospheric deposition have contributed contaminants to sediment layers lining the bottom of streams, rivers, lakes, and estuaries. Contaminated sediments contribute to violations of Water Quality Standards and fish advisories in many waters. Contaminated sediment management (Superfund sites, dredged material etc.) is critical to ensuring the environmental and economic vitality of the Region's aquatic resources. For example, the Port of New York/New Jersey generates a $20 billion economy and nearly 170,000 jobs within the Port Region. Therefore, contaminated sediment management is a critical component to the environmental and economic well being of this Region.

Contaminated sediments in some of the Region's major river systems including the Upper Hudson, Passaic and Grasse Rivers are being addressed under the Superfund program. During FY 2000/01, it is expected that remedies will be developed and assessed for these rivers; major effort will be spent on completing the studies, cross-program coordination and in conducting outreach on these projects. In addition to selecting remedies for the major river systems noted above, Region 2 is working to ensure that contaminated sediments in other waterways such as the Port of New York/New Jersey, Great Lakes, and San Juan Harbor, are managed in an environmentally and economically sound manner. The use of contaminated sediments as a resource for beneficial use is one area that can generate cross- program interests. This is evident in the Brownfield and Dredged Material Management Programs where stabilized or decontaminated sediments can be used for enhancing community of port redevelopment with economic drivers as incentives.

EPA's Contaminated Sediment Strategy (1998) documented more than ten Federal statutes providing authority to many EPA program offices to address the problems of contaminated sediment. This has resulted in fragmented, and in some cases duplicative efforts in necessary research, technology development, data gathering, GIS/visualization for sediment assessments (hot spots), and pollution control/prevention activities required to effectively manage contaminated sediments.

Goal EPA Region 2 will implement and coordinate a cross program, interagency and interstate integration of contaminated sediment management programs to ensure the environmentally sound management of contaminated sediments.

Strategy EPA has the authority under numerous statues to address contaminated sediments. These statutes include NEPA; the Clean Air Act; CZMA; FIFRA; MPRSA; RCRA; TSCA; CWA, CERCLA; and the Great Lakes Critical Programs Act of 1990. A sediment management integration in-house group/team should be established. This group combines, assessment, technology, policy, regional economics, engineering, coastal oceanography, pollution prevention, and beneficial use options with cross-cutting programmatic expertise to EPA Region 2 program/project managers on a consulting basis. Expertise within this group can facilitate technical transfer between other EPA Regions and other federal and state agencies as well as international collaboration/interests.

Key Actions

1) Region 2 is performing, or overseeing responsible parties performing, studies to determine the extent of sediment contamination and evaluate appropriate remedies for rivers with contaminated sediments. In the case of the Passaic River, the sediments are contaminated with dioxin, whereas the upper Hudson River, and the Grasse River are contaminated with PCBs. Accordingly, the Region will continue to allocate resources to studies involving complex science and risk issues, peer review processes, and extensive community involvement work.

2) Region 2 will continue to work with the USACE, New York and New Jersey, on the Dredged Material Management Plan which provides the framework for dredged material management over the next 50 years. One potentially feasible component of this plan involves treating the contaminated sediments to lower the contaminant levels such that the sediment can be used beneficially (topsoil, cement, light- weight aggregate, glass tiles). Since 1992 under the Water Resources Development Act, EPA has obligated approximately $18.8 million in contract awards to support development of decontamination technologies. Upcoming work includes construction of decontamination facility (s) with the ability to process up to 500,000 cubic yards/yr of contaminated sediment, with significant cost sharing through public/private partnerships.

3) In NY/NJ Harbor, Region 2 is working with the states of New York and New Jersey under the auspices of the Harbor Estuary Program (HEP) to develop and implement a $30 million comprehensive assessment program focused on controlling inputs of toxics to the harbor.

4) Other major activities include sediment management in the Great Lakes Region through coordination with Great Lakes National Program Office. In particular, Region 2's commitment in maintaining the Niagara River Toxics Management Plan provides strategies to reduce toxic loading of the river, in turn reducing the potential for contaminated sediments for 18 priority toxic chemicals.

5) Sediment management coordination will occur with federal, state, tribal and local officials and community groups. To develop its strategy to address contaminated sediments in waterways to be dredged and the HEP, the Region also coordinates with these stakeholders, the Port Authority, fishing/environmental groups, and members of academia.

Selection of multi-million dollar remedies in these major river systems will have national implications and may set precedents. Ultimate cleanup of contaminated sediments will directly benefit public health and the environment, addressing risks posed by years of industrial pollution. The component of the strategy dealing with dredged material management will contribute to the economic and environmental vitality of the Port of New York/New Jersey. Potential barriers: (challenges which should be addressed in parallel in order to accomplish the strategy): Cross- program coordination will need to be maintained to ensure that ongoing discharges to these rivers are identified and controlled, so that after remediation, river sediments do not become re-contaminated. In addition, there have been

attempts to limit EPA's authority to implement dredging projects. Resources are limited for the contaminated sediment management work that is undertaken based on upland placement options. This problem is further compounded due to the large degree of controversy over ocean/aquatic disposal, lack of a consensus on dredged material management options, lawsuits, and controversy over an acceptable level of environmental protection/risk.

Data Management

EPA and its state partners use a wealth of environmental data from a variety of sources. Due to the media-specific basis for most federal environmental laws and the different time lines on which each was implemented, each environmental protection program is supported by a separate information system. Similarly, state and local governments have generally developed organizational structures, programs and associated environmental data systems to address specific, single media concerns.

In recent years, the concepts of environmental protection have evolved toward cross-media environmental impacts, and pollution prevention at the source, and require a well-informed public participating in the decision-making process. In most cases, environmental data collection and management have not adjusted to this evolution and data are still collected and maintained in media-specific ways. At present, data collected from different media programs are of varying quality and are difficult to integrate for cross-media or geographic analyses. However, this type of data integration is rapidly becoming more feasible due to increasing availability of desktop and geographic information system applications that facilitate user friendly integration of ambient and modeled data, EPA regulatory information, basic geographic reference information (roads, administrative boundaries, aerial photography, etc.), natural resource information, and demographic and health data.

The existing data in EPA's data management systems have been used nationally with varying degrees of confidence. The major concerns are the completeness and the accuracy of the data and the variations of definitions of certain activities across different media or in different Regions. The records of activity in these data systems may under represent actual work, which will skew the results and validity of any analysis. Furthermore, different mainframe systems have different update schedules, necessitating careful attention to scheduling analyses.

In a climate of budget cuts and downsizing, resources for data entry and data base maintenance are an ever-increasing problem. The amount of data traditionally being entered may not meet the priorities and directions of the states. Additional incentives may be needed for the states to enter quality assured data.

All of the national data systems are in need of improvement and modernization. Many of the states have initiated efforts to modernize their data bases. As a result, challenges have surfaced which complicate the states' abilities to provide required data from their new data systems to EPA's "legacy" data bases. Furthermore, much of the data is still entered manually rather than transferred electronically.

Goal Region 2 will improve our ability to identify, prevent and reduce environmental threats by developing and maintaining secure, consistently available, "state of the art," user friendly, integrated environmental information systems at Federal/State level, which are readily accessible to public - including ambient data; geospatial/landscape/place-based data; regulatory and compliance data; and associated programmatic data (grants, etc.).

Strategy Continue to participate in the various projects associated with modernization of the national data systems, and the "seamless" electronic transfer of data from state systems to national data bases, including: the General Enforcement Management System (GEMS) to consolidate all the compliance and enforcement information in one system; the PCS Interim Data Exchange Format (IDEF) project allowing the states to electronically provide EPA water regulatory data from state data systems; the Facility Identification Initiative (FII) to reconcile environmental information in our various regulatory databases and develop a single, normalized information record which will eventually become the standard facility identification and location record; the Electronic Data Interface project to allow permittees to submit DMR data electronically to reduce gross errors with automated checks, and reduce transcription errors by eliminating duplicate manual data entry into the system; the Locational Data Improvement Project (LDIP) to improve the accuracy of latitude/longitude information in EPA and state data systems; the One-Stop Program to improve the state partners' capabilities for data integration (including enterprise data systems); and the Information Integration Initiative (I3), an umbrella effort that aims to fully integrate the other listed efforts, and Agency efforts to develop a secure computing and telecommunications environment that supports data exchange with state partners. The region continues to invest in the underlying data to support cross-media data integration through GIS and other data visualization tools, staff training and development of desktop and internet-based tools to support programmatic decision making.

Key Actions

Maintain and improve the existing time lines, SOPs, and QA/QC procedures of each media data system to ensure they are current and consistent, and emphasize the importance of proper and timely data entry.

Development and implementation of procedures for regional programs to submit data into the STORET data system. SOPs also would provide diagrams/descriptions of data flow from the LIMS and other data systems including the use in GIS systems and roles and responsibilities of Regional and Headquarters personnel.

Continue to support development of data quality performance standards for EPA's major data systems to track and improve data quality over time.

Continue to invest in the underlying data to support cross-media data integration through GIS and other data visualizaion tools, staff training, and development of desktop and internet-based tools to support programmatic decision making.

Investigate error correction process to ensure that discrepancies in Region 2 data are routed to the appropriate media program managers, for both Region 2 and our state partners.

Continue to work with the states to acquire accurate locations for facilities, discharge points and monitoring locations under the locational data improvement program.

Encourage the states to continue to maintain and improve the quality of the data through grant negotiations and technical assistance.

Work with Headquarters to expedite the phased development of GEMS to provide maximum flexibility at the earliest

possible time.

Work with EPA-HQ to foster the Electronic Data Interface project to allow the regulated community to submit DMR data and other required information electronically.

Focus management attention on the need for adequate resources (FTE or contractor) to be devoted to update and maintain the national data systems. Senior management needs to identify existing technical problems that States are experiencing to update and maintain national data systems, i.e. STORET, and then determine the level of financial and personnel resources required by States and EPA to implement this data exchange. Work with National Program Managers to have larger grant and contract amounts allocated for state and regional data entry and data base maintenance.

Minimize the impact on the Regions and States of data retrieval/data analysis requirements by establishing a finite list of measures, articulating a comprehensive list of the existing reporting requirements, accepting any regional reporting mechanism if specific automated reporting platforms are not specified at the time new measures are introduced, sharing all select criteria (including specific computer logic) with the Regions during development of retrievals and at implementation, working with the Regions, and EPA - HQ program offices and the information office to synchronize definitions of similar compliance and enforcement activities, releasing all new data analyses and targeting tools through a single point of contact in Headquarters so that data cleanup impacts are evaluated and coordinated.

Increase the awareness within the Region and our States partners of the data quality impacts of data analyses, and to the extent feasible, incorporate data analysis needs into the planning and sequencing of data cleanup activities.

Facilitate the Regions' and states' preparation for the transition from EPA legacy data systems to GEMS by establishing pre-GEMS development steps and protocols, including a comprehensive, phased plan to improve data quality, and minimum data needs (consistent with the Deputy Administrator's requirements for burden reduction.)

Provide training to the public (community groups, etc.) to enable them to readily access Envirofacts and other agency data systems.

Work with/encourage EPA Headquarter to develop “active data retrieval” systems/software that can identify particular information in state data systems and upload it into national data systems (state systems would have to follow standards/protocol for data).

Work with/encourage EPA Headquarters to develop “business to business” ADP systems with our states to exchange information and conduct business (grants, etc.).

Support the Regional Environmental Data Initiative (REDI) Project. This initiative is developing and pilot testing an electronic data deliverable format and data manipulation system which will be able to retrieve data from STORET. It will include connections through the EQuIS software package to many other programs that will allow easy report writing, data presentation, statistical evaluation and modeling. The project is currently being pilot tested by the CBEP, RCRA and CERCLA programs which have provided monies for contractor support through early 2001.

Coordinate with the States, National Computer Center staff in North Carolina and the national system managers in Washington to ensure stable telecommunication links with state systems are maintained that are compliant with interagency information security needs.

Environmental Justice

Goal Region 2 will strengthen its Environmental Justice program initiatives to better safeguard minority and low income communities from disproportionately high and adverse environmental impacts.

Strategy Where disproportionately high and adverse impacts are found: we will exercise our enforcement and other authorities, in concert with our state and local partners, to address such impacts; and we will help such communities to (a) better understand how the Agency operates, (b) have increased opportunities for meaningful involvement in the decisions that affect their communities, (c) build their community's own capacity to address environmental problems, and (d) share public environmental information that is understandable and accessible.

This strategy links with, and supports, the regional strategies for children's health and urban environments. This proposal supports the cross-agency EJ program, and implements the President's 1994 Executive Order 12898 which requires each federal agency to make achieving EJ part of its mission by identifying and addressing disproportionately high and adverse human health and environmental effects of its programs, policies and activities on minority and low income populations.

Key Actions

1) Finalize and implement the Interim Policy on Environmental Justice that provides the Region's managers and staff with a fair, systematic, and consistent approach to use in identifying and addressing minority and low income communities that may suffer disproportionately high and adverse environmental impacts.

2) Continue our efforts to process data and further refine the Environmental Load Profile (ELP) tool, a geographic information system (GIS) based mapping tool developed to implement the Region's Interim Policy and aid in identifying potential and actual EJ areas or communities. The ELP tool can have broad application and can also be used widely throughout the Region in other community and geographic or place based demographic studies.

3) Continue our outreach efforts to affected EJ communities to assist them in identifying, prioritizing and addressing disproportionately high and adverse environmental impacts in their communities and where possible ensure that they are meaningfully involved in the Region's environmental decision-making that impacts their communities

4) Continue our outreach efforts to our state, tribal and local government partners to increase their awareness of the importance of EJ and Title VI policies of the Agency, to encourage them to incorporate EJ into their permitting programs and processes, and to assist them in development of their own EJ and Title VI programs.

5) Continue our effort to provide EJ training to Regional staff and managers to ensure that they are apprized of new developments in the Agency's Title VI and EJ policies and programs, and made aware of the importance of EJ as an

Agency priority and are considering EJ in carrying out their programs' everyday responsibilities.

6) Continue our effort to enhance the Caribbean Environmental Protection Division capacity to address environmental justice concerns unique to Puerto Rico and to enhance relations between the Puerto Rico regulatory government agencies and the affected communities by working with EPA Headquarters to create the National Environmental Justice Subcommittee on Puerto Rico, the newly established federal advisory Subcommittee composed of diverse stakeholders who live in Puerto Rico and provide representation on the Subcommittee that ranges from grassroots and non governmental organizations to academia, industry and local government.

7) Continue the Environmental Justice and Environmental Justice through Pollution Prevention grant programs, which are targeted to enhance EJ communities' abilities to identify, understand and address environmental issues affecting them.

Geographic Approaches (e.g., Community Based Environmental Protection, Sustainable Development, Urban Initiative)

Activists often identify areas they believe are at risk due to local sources of pollution or high incidences of health related problems. Agency data bases, such as TRI, indicate communities that are situated in the vicinity of releases that may pose increased risks to residents. EPA has attempted to respond to such threats by a variety of initiatives. The continued evaluation of the nature and impact of potential threats is necessary for the agency to meet the goals it has set for itself with respect to community risk reduction, Environmental Justice, and children's health.

Goal Region 2's Geographic Approaches seek to: 1) protect, restore, and sustain the quality of the land, air, water, and living resources in particular places and in ways that help ensure the long-term social, economic, and human health benefits for future generations, and 2) build strong local capacity so that communities can identify environmental and public health threats they are facing and then find solutions.

Strategy Region 2 will develop its overall capacity to enhance the environment and sustain development in communities and area-wide locations throughout the Region, with a special emphasis on economically disadvantaged urban communities.

Region 2 will continue and expand upon efforts to provide information, technical support, and where available, funding assistance to strategic partners (i.e., state, tribal, and local governments, regional planning authorities, Community Development Corporations, nonprofit environmental groups, transportation planning organizations, the private sector and other federal agencies) involved with a stakeholder driven and community-based environmental protection efforts. We will better assess our existing programs and authorities to identify opportunities to support local efforts that enhance the environment and promote sustainable development within communities and area-wide locations.

Region 2 will continue to identify our communities and area-wide locations for targeted technical support, and where available, funding assistance. An improved inventory of priority communities and regional areas will give us more information on major environmental threats, important local and regional stakeholder groups, and the capacity to respond to environmental threats and improve local and area-wide livability conditions.

Region 2 will encourage environmental management approaches, such as multimedia inspections and the use of Supplemental Environmental Projects (SEPs) within appropriate enforcement actions that emphasize reductions in pollution emissions, sustainability and livability. In addition, we will explore how some of our place-based objectives can be achieved through existing NEPA authorities, improved collaboration with the pollution prevention program and the National Eco-industrial Roundtable. The incorporation of pollution prevention, eco-industrial development, and sustainability approaches into the Regions activities and partnerships will improve the overall environment and help create vibrant, livable, and economically diverse human communities.

Key Actions

1) Continue and Expand Upon Place-Based Projects The Region currently has a large number of place-based efforts underway (e.g., Camden, Puerto Rico, Peconic Estuary, South Bronx, etc.). We will continue to support the activities for these local projects, and we will also initiate new projects as needed. We will work in partnership with the Mid-Atlantic Federal Partners for the Environment (MAFPE) to develop or assist on a number of new or existing pilot projects with state and local governments to coordinate agency programs in a manner that supports state and local initiatives to manage growth and protect vital resources. All projects will incorporate community and stakeholder goals and values, consider possibilities for eco-industrial development concepts, and will have a special focus on working with low-income and/or minority populations.

2) Continue to Fund Place-Based Activities The Region will continue to provide funding for place-based activities through programs such as the OPPTS CBEP funding program and the Regional Geographic Initiative funds. We will also offer Community Grants training to regional staff and interested communities.

3) Continue and Expand Capacity-Building for Communities and Area-wide Locations The Region will offer capacity-building tools to communities and area-wide locations so that they can identify their major environmental problems, set priorities, and forge solutions through an open and inclusive process. For example, we will pilot the Smart Growth Index model in the Delaware Estuary and work to expand and update our Community Resource Web page.

4) Continue and Expand Our Own Organizational Knowledge and Capabilities The Region will continue to sponsor the Sustainability Speakers Series and offer special training on topics such as conflict resolution, eco-industrial development and industrial ecology, and the municipal use of environmental management systems.

5) Expand Partnerships The Region will expand its partnerships to address sprawl and a variety of other place-based issues with federal, state, tribal and local government agencies through annual grant workplans, PPAs, PPGs, and other joint planning documents. The Region will assist the White House Task Force Liveable Communities work with the City of Rochester to implement their *Rochester 2010* Strategic Plan, and their work with the New York City community partnership on open space planning. EPA Region 2 will form a working group to coordinate smart growth, land use, and sprawl related efforts. As part of the commitments made in the Memorandum of Agreement (MOA) among the MAFPE, Region 2 will also participate in the existing Federal Interagency Working Group on Sprawl, which will focus on providing resources to several pilot projects. In addition to the MAPFE projects, Region 2 will also promote the development of two Smarth Growth Networks; one in New York- New Jersey and a second in the Caribbean. These Networks will bring federal agencies, state, tribal, and local governments, non-governmental organizations, and others together to discuss sprawl issues, discuss policy initiatives, regulatory and tax incentives, and share data and GIS

based tools.

6) Improve Ability to Target Priority Communities and Area-wide Locations The Region will improve its ability to target priority communities and area-wide locations by better understanding local environmental conditions and stakeholders. We will build upon the Environmental Load Profile tool developed as part of the Region 2 Environmental Justice Interim Policy. This geographic, web-based targeting tool will enable regional staff to identify potential environmental and public health threats in specific geographic areas. The tool will subsequently be adopted for broader stakeholder use through a publically available web-based application. We will also complete the Stakeholder Tracking System (which currently contains more than 1000 groups) to enable us to better target outreach based on a community group's expressed area of interest, group type, capacities, network relations, and location.

7) Review other Federal Agencies Actions Many activities conducted by other Federal agencies require environmental impact statements. Where appropriate we will review these actions to ensure that the agencies have considered the cumulative impact of their actions. This will ensure consideration of the impact of the specific action under review in the context of all actions undertaken.

Groundwater

There has been no single, comprehensive national base program for groundwater remediation and management. Ground water protection and restoration requires a cross program strategy. The major programs that investigate and remediate groundwater on a site specific basis are RCRA, CERCLA, UST and UIC. The air program also inspects dry cleaners for signs of illegal releases to ground water and refers the potential problems to other programs. In addition to the site oriented remedial programs, the SDWA requires the delineation and assessment of source water protection areas as a means of encouraging voluntary groundwater protection efforts. Parallel assessment efforts take place in the pesticide program as they attempt to identify aquifers vulnerable to contamination by overuse or misuse of pesticides. Section 319 of the CWA also reduces non point sources of contamination to ground water. The criteria that must be met to undertake remediation of contaminated ground water vary widely depending on the statutory authority, impact on water supplies, and lead agency. States are required to characterize the ability of their groundwater resources to support beneficial use (drinking water, ecological support). However, the States' ability to accurately assess groundwater quality is severely hindered by limited monitoring and lack of a central database for groundwater quality information. EPA's 1999 Report to Congress concluded that fragmentation of ground water programs can impede effective management of the resource. We will attempt to overcome the fragmentation by closer coordination of the data collected and used by the programs, and by making cross program guidance more consistent.

Goal Region 2 will manage groundwater contamination on an area wide basis that cuts across both programs and individual site boundaries. This will allow us to view groundwater contamination on an area wide basis; increasing the efficiency, effectiveness, and consistency of ground water contamination prevention and restoration efforts.

Strategy Region 2 will increase the collection of spatially referenced data and enhance abilities to manipulate data in a spatial format.

Key Actions

1) Region 2 will facilitate the development of a groundwater monitoring and assessment plans with states to identify under monitored and vulnerable aquifers. Projects will include evaluating the impacts of agricultural Nonpoint sources and septic systems on shallow groundwater quality.

2) Region 2 is also assisting PR and the VI by providing training and assistance in the use of STORET so that their data may used and assessed more uniformly.

3) In order to improve our ability to assess groundwater quality we have several efforts underway. NJ is currently making all of its remediation program data (including extensive ambient and contaminant plume groundwater data) available on the EquIS database. Groundwater contamination areas and Groundwater Classification Exception Areas (CEAs) will be identified as GIS coverages using these data. NJ is also working with their geological survey to develop an ambient groundwater quality monitoring system which will identify shallow groundwater that is being impacted by point and non point sources. Region 2 is supporting these efforts by developing a Regional database that will be compatible with NJ's database to store and manage the large volume of groundwater data EPA collects. To provide an area wide and cross-program perspective to groundwater problems, the Region is developing the Regional Environmental Database Initiative (REDI) project. This project will facilitate the easy electronic transfer of ground water data from multiple programs into a central database where it can be stored and readily accessed and manipulated by many users. The Region and our states will need to expend significant efforts to implement this system, to develop tools to manipulate the data and train a user base in the Region and our states.

4) While RCRA and CERCLA have developed a few joint guidance documents, the various programs generally work independently regarding decisions to investigate and restore contaminated ground water. State programs operate in a similar manner. To improve the consistency of how the Region and States address groundwater contamination, the Region should develop and implement a model approach for setting priorities at groundwater contamination sites. This prioritization approach as well as other cross-program groundwater policy and technical issues should be addressed by a joint technical/policy committee. This committee could be similar to the pre-1996 Ground Water Steering Committee, however, we recommend that it have one sub-committee primarily addressing technical issues and the other addressing policy and management issues.

Indian Nations

Goal Region 2 will ensure close involvement of Indian Nations, and appropriate recognition of the unique relationship between the Indian Nations and the Federal government, in pursuit of its efforts to protect human health and the environment.

Strategy Region 2 will continue its efforts to implement the March 14, 1994 Indian Policy. Key components of the policy include: working with the Nations on a government to government basis; recognizing them as the primary parties for setting standards, making policy decisions and managing programs; encouraging and assisting tribes in assuming regulatory and program management responsibilities; considering Indian Nation concerns and interests in decision making; and encouraging cooperation between Indian Nation, State and Local governments and other Federal agencies.

At present we provide financial assistance to five of the seven federally-recognized Indian nations located in the Region

2 area. The St Regis Mohawk Tribe (SRMT) and the Seneca Nation of Indians (SNI) receive grants directly from Region 2. The Tuscarora Nation, Cayuga Nation and Tonawanda receive grant funding - as they requested - through the Haudenosaunee Environmental Taskforce (HETF). Until 1998, we also provided financial assistance to the Oneida Indian Nation (OIN) directly through grants. We have and will continue to provide technical assistance to all seven Indian nations, including the Onondaga Nation.

The Indian Environmental General Assistance program is the key form of assistance, assisting the Indian nations with program development, including development of Environmental Assessments, QA plans, GIS database development, environmental program capacity building, and development of regulations/codes and management programs. Subsequently, both technical assistance and program grants support the Indian nation implementation of environmental program activities. Many of the actions being undertaken in Indian Country are described under the specific agency goals. Below we describe those actions that pertain to assessment, planning, technical support, capacity building and coordination that are not tied to individual goals and objectives.

Key Actions

1) *Development of Indian Nation/EPA Agreements (TEAs)*

Region 2 senior management discussed TEAs and strategic planning with the 7 federally recognized Indian nations' leadership on a number of occasions over the past few years. As a result:

a) *The St Regis Mohawk Tribe (SRMT)* have negotiated a Performance Partnership Agreement (PPA) with Region 2, based on the Haudenosaunee Thanksgiving address. The SRMT have undertaken an environmental and programmatic self-assessment, identifying the strengths, weaknesses and opportunities for improvement of its various programs. The SRMT PPA establishes an action plan for maintaining and improving its resources management, detailing the specific actions and approaches SRMT plans to take during the effective period (five years) of the agreement, based on an appropriate environmental and program performance indicators.

b) The Seneca Nation of Indians (SNI) utilizing General Assistance has begun to assess its environment.

c) The Haudenosaunee Environmental Task Force (HETF): has prepared its version of a TEA for several Haudenosaunee communities (including some of the federally recognized Indian nations) in the "Haudenosaunee Environmental Restoration Strategy"

2) *Building Tribal Capacity to Administer Environmental Programs*

Through training, technical assistance, EPA program grants and general assistance, and coordination with other federal agencies and organizations, the SRMT, SNI and Oneida Indian Nation have begun to develop infrastructure to protect their environments. Through training and technical assistance and/or EPA funded HETF consortium efforts, the other nations, that is the Tuscarora, Tonawanda, Cayuga and Onondaga have also begun to develop environmental infrastructure.

Aquifer and Aerial Maps and GIS Capability - EPA has and will continue to assist the Indian Nations in acquiring USGS aquifer maps, aerial maps, GIS data layers, training, and access to information in other agencies.

Quality Assurance training and support will be provided through the SRMT.

3) *Field Assistance in Indian Country*

HQs has provided funds to Region 2 to support a circuit rider. This should be of assistance in all our efforts.

Region 2 will continue to provide technical assistance to the Tonawanda, Tuscarora, and Cayuga Nations through the HETF.

Region 2 will continue to support the Indian Nations with Emergency Response capacity as needed.

4) *Enhancing Communications*

In order to better coordinate our efforts we hold regular meetings with the Indian Nations. These meetings include: Annual meetings between the Indian nation leadership and the Regional senior managers, Indian Nation visits to Reg 2, meetings of the national Tribal Operations Committee and efforts toward developing clearinghouses of informational databases and coordinating information exchanges for all Haudenosaunee communities within/beyond Region 2. Region 2 will also work with the Indian Health Service (IHS), the Bureau of Indian Affairs (BIA), the Federal Emergency Management Agency and other Federal agencies, to discuss Indian environmental program building and how to best utilize our respective resources, leveraging them, developing partnerships as appropriate.

Re-invention and Innovative Approaches

Goal Although traditional regulatory programs are still the essential core of the EPA's mandated work, re-invention initiatives and innovative programs allow the Region to explore new solutions to complex environmental problems. Region 2 will continue to focus on innovation of environmental management, so as to promote efficiency, effectiveness and a more pro-active approach to addressing future demands for improved protection of public health and the environment.

Strategy Region 2 will coordinate with the Office of Policy, Economics and Innovations (OPEI) to support new and ongoing re-invention initiatives and innovative programs. We will encourage our state and local agencies to partner with us in promoting innovative approaches to environmental protection, including the administration of leadership programs, voluntary initiatives and enhanced public outreach. We will work together with industry sponsors, community representatives, as well as any other interested stakeholders to test fundamentally new approaches to environmental protection.

Key Actions

1) Promote the Development of Regional XL Projects

Region 2 will continue the development of Regional XL Projects, moving toward completion of all Final Project Agreements and any necessary legal implementation mechanisms (such as rule changes). As project implementation is underway, the Region will track project success and collect appropriate data for project evaluation. We will work with the project sponsors to ensure smooth progress in reaching XL program goals. The Region will assist OPEI in exploring the potential application of XL innovations on a broader scale once the innovations have been piloted and

demonstrated their utility.

2) Coordinate critical elements of the National Performance Track

Region 2 will coordinate the implementation of the two-tiered National Performance Track, by conducting outreach and training to our states and marketing the program to potential industry participants. The region will screen any program applicants to ensure a proper compliance record prior to acceptance. The region will assist OPEI in developing the second tier of the program, including entry criteria, incentives for participation and implementation procedures.

3) Develop Further Reinvention Opportunities

a. Geographic Approaches - Re-invention efforts will be integrated with those community and area-wide location strategies presented within the Geographic Approaches section herein.

b. Industrial Ecology - Region 2 will continue to participate on an OPEI sponsored National Workgroup to explore the opportunities provided by a variety of industrial ecology tools and approaches to solve complex and intractable environmental problems. Region 2 will continue to explore the use of materials flow analysis techniques to identify pollution prevention opportunities within the New York - New Jersey Harbor as part of a cooperative agreement to the New York Academy of Sciences.

c. Innovation Symposiums - The Region will participate in idea-sharing and information exchange related to charting the course of future innovations based on past state and EPA experiences. In addition, the Region will evaluate the potential use of an internal program-wide survey to identify those priority environmental problems that have not responded to traditional regional approaches, and consider useful innovative environmental management solutions and our capacity to respond.

d. Innovative Approaches to Environmental Management - The Natural Step (TNS) is a nonprofit environmental education organization which has developed a framework to help individuals and organizations address key environmental issues from a systems perspective. The framework helps develop a shared mental model for problem solving, for the development of consensus documents (e.g., sustainable practices with regard to metals, energy, agriculture, and forestry), and can be used by industry, corporations, municipalities, governmental organizations and others as an instrument for strategic planning toward sustainability.

The Region, as part of its effort to inform itself about sustainability and facilitate society's endeavor to become more sustainable, will provide training for regional staff on The Natural Step. RCRA Programs Branch (RPB) will act as a pilot for the Region in exploring the benefits of incorporation of The Natural Step's sustainability framework into their programs. RPB will serve as a conduit of information on innovative environmental management solutions by actively sharing The Natural Step's principles and other concepts at the Waste Minimization Industry Roundtables in order to promote its waste minimization program.

e. Innovations Task Force - The Region will implement the Agency's 1999 Innovations Task Force recommendations, including the formation of two Good Neighbors groups for the Region.

Agency Base Program Descriptions

The Region and our partners in the States and Indian Nations carry out a wide variety of activities designed to protect public health and the environment. The strategies that have been described in the preceding sections are directed at what the Region considers to be its priorities. What follows are extracts from EPA guidance documents that attempt to briefly describe a fuller range of activities carried out in the Region.

Clean Air

Ozone In 2001, EPA will continue to administer the national program to implement the 1-hour NAAQS for ozone, providing oversight and coordinating with Regions and States to provide national consistency and developing policy and guidance to resolve major issues. EPA will continue outreach efforts, working with States on voluntary programs and economic incentive programs and expanding availability of health data under the Air Quality Index to communities and health practitioners. EPA will also evaluate the need to revise the general conformity rules and provide guidance on SIP program requirements. The Agency will continue to work with the Tribes. EPA's future actions, especially in implementation of the 8-hour standard, will be contingent on pending court actions.

EPA will provide support to the most serious ozone nonattainment areas to operate the Photochemical Assessment Monitoring Stations (PAMS) networks which provide as much information as practicable on the roles of ozone precursors, pollutant transport, and local meteorology in the photochemical process. These networks establish a feedback loop on proposed ozone control strategies and provide data useful for evaluating the success of the control programs and developing mid-course strategy corrections. The data gathered by PAMS enable the state and local air pollution control agencies to effectively evaluate ozone nonattainment conditions and identify cost-effective control strategies.

In the mobile source arena, EPA will ensure the in-use emission performance of vehicles, fuels, and engines through the implementation of new standards and compliance oversight. In FY 2001, emission standards will be in place for a wide range of mobile sources. This includes not only all types of vehicles from passenger cars to large commercial trucks, but also marine engines, non-road equipment, and locomotives. In concert with States, Tribes, and local governments, EPA will identify the most environmentally-critical classes of vehicles and engines to monitor and assess their emission performance. These programs will help ensure vehicles, fuels, and engines are as clean as required by law.

EPA's current regulations for nonroad compression ignition engines for engines over 37 kW (50 hp) for Tier II and Tier III reduced the NOx + HC emissions standard by 30% to 37% (based on the power class) from the previous 6.9 g/hp-hr NOx and 1.0 g/hp-hr HC standard. Regulations for under 37 kW (50 hp) were also promulgated for this previously unregulated class of engines. As a follow-up, EPA is undertaking a technology review with an Notice of Proposed Rulemaking scheduled for a Fall 2000 release and a final rulemaking in late 2001. The technology review will reassess the NOx + HC standards and will set the next phase of PM standards for over 37kW and up to 560 kW. The emissions limits will also be reexamined for the under 37 kW, which is scheduled for implementation in 2004. The issue of the sulfur content of nonroad diesel fuel will be raised and comments will be taken on lowering the fuel sulfur level with a 500 ppm cap. The certification duty cycle for this class of engines will also be revisited to implement a transient duty cycle that gives some assurance of better in-use control of particulate matter.

Particulate Matter/Regional Haze In 2001, EPA, States and Tribes will continue to review PM10 monitoring data and

implement the CAA requirements for the pre-1997 PM10 standard, including bump-ups and SIP rulemaking actions on plans for serious PM10 nonattainment areas. Regions and States will also be supporting the national PM2.5 monitoring network and carrying out source characterization analyses. States and Tribes will use the air quality data and chemical speciation data to identify PM sources and hot spots for purposes of developing any SIPs and TIPs that may be required. EPA will continue to work with States and their respective regional planning bodies to determine the steps that are needed to preserve clear days and improve visibility in the 156 Class I areas. Many of the PM2.5 chemical speciation monitoring sites will collect their first complete year of data in CY 2001. It is important that OAR, Regions, and States monitor this program's progress, and continue to support this data collection effort.

Carbon Monoxide EPA will continue existing CO work, concentrating primarily on mobile source programs (such as winter oxygenated gasoline and reformulated gasoline), and on assisting States to implement attainment and maintenance plans. In the mobile source program, the control of CO at the Federal level is carried out as an integral part of the control programs for ozone and NOx. Only a relatively small amount of work is directly aimed at CO control, mainly as it relates to nonattainment areas, and the associated planning (SIPs, conformity) and control measures (I/M, oxygenated fuels).

Sulfur Dioxide Of the approximately 33 SO2 nonattainment areas, 23 are measuring air quality levels at or better than the NAAQS. EPA will continue to work with these areas to bring about attainment of the standard and to encourage attainment redesignations. The SO2 program is not expected to grow in the near future. The most recent review of the SO2 standard was completed in 1996 and the standard was reaffirmed. In response to a petition for judicial review of that decision, the court has remanded the case to EPA for further explanation of its decision. In response to this remand, EPA will further explain its decision and issue a final intervention level policy which is intended to give States guidance on identifying and addressing localized, infrequent peak short-term concentrations of SO2 to supplement the protection provided by the NAAQS. Most of EPA's efforts to reduce the more pervasive sulfur oxides will reside in the acid rain, particulate matter, and regional haze programs.

Nitrogen Dioxide All monitoring locations across the country meet the standard for NO2. EPA will continue to ensure that all areas are in compliance with the standard and will review the standard to ensure that it adequately protects human health. The NO2 program is not expected to grow in the near future. EPA will, however, boost efforts to reduce the more pervasive and transported nitrogen oxides in implementing the NOx SIPs and in the acid rain and mobile source programs, encouraging market-based, low-cost pollutant trading. These programs will simultaneously address nitrogen oxides, ozone, and fine particulate matter.

Lead EPA will continue a relatively low level of existing work, emphasizing primarily the few nonattainment areas near smelters. Mandating the use of unleaded gasoline will continue to be the most effective way to prevent airborne lead.

Grants To address these pollutants areas, and support related non-Title V minor source permitting, EPA has targeted approximately $26 million in State and Tribal Assistance Grants.

Title V Operating Permits Program EPA will continue to oversee implementation of the operating permits program. HQ will complete its Part 70 revision rule and 302(j) rule in late 2001. Guidances needed to implement Parts 70 and 71 will be issued as needed. Regions will maintain their effort of reviewing proposed permits, assisting their permitting authorities in getting all initial permits issued, and monitoring the permit renewal requirements. They will also complete

issuance of all operating permits in Indian Country. Outreach to the public in the form of citizen training will be maintained (subject to funding availability). States will continue to issue operating permits with a goal of all initial permits issued by early 2001. States will also ensure that sources needing renewal permits will follow the correct procedures. Finally, by late 2001, States will need to decide how they want to address their interim approval issues and needed regulatory changes pursuant to issuance of the Part 70 revisions rule.

New Source Review/Permits EPA plans to complete the NSR Reform rulemaking in FY 2000. This will trigger a requirement for state and local agencies to submit SIPs to incorporate these revisions beginning in FY 2001. In addition, to improve the tracking of the implementation of the base program, EPA will develop a central reporting spreadsheet in one format for all Regions to keep track of PSD and non-attainment NSR permits received for review, major source permits reviewed and commented upon, and major source permits issued by state or local agencies. State and local agencies will continue to issue major source NSR and PSD permits that comply with the Clean Air Act.

Air Toxics Toxic air pollutants pose a significant health risk in that they can cause cancer and other health problems such as reproductive disorders, birth defects, and damage to the nervous system. It is common for the increased lifetime cancer risks from the mixture of a subset of urban air toxics to exceed 1 in 10,000 in U.S. cities. People who live near major industrial plants may face even higher cancer risks from air toxics.

As described in its July 19, 1999 Federal Register notice, the EPA's national air toxics program is comprised of 4 key components: 1) the development of source-specific and sector-based standards; 2) national, regional, and community-based initiatives to focus on multi-media and cumulative risks; 3) National Air Toxics Assessment (NATA) activities, and; 4) education and outreach. The integration of these 4 components to provide a holistic approach to solving problems presented by the emission of toxic compounds into the air is the primary goal of EPA's air toxics strategy. Simply stated, this strategy strives to provide the information and the infrastructure necessary to appropriately develop and implement standards and risk-based initiatives. To implement this strategy, EPA will be shifting the focus of its efforts from standard-setting alone toward assisting States, Tribes and the private sector with the acquisition of scientific information about air toxics problems, implementation of standards, and the evaluation of progress in reducing emissions and risk, through improved emission inventories (including improved information on compliance), air quality monitoring data, and modeling and risk characterization techniques.

In addition to our stationary source air toxics program efforts, the Agency will continue to work on several important components of our mobile source air toxics program. The Agency will be developing new actions to follow through on a mobile source air toxics strategy that will be included as part of our '202(l) rulemaking. That strategy is intended to address those mobile sources, particularly nonroad sources, that were not comprehensively addressed in that rulemaking.

The Agency will also be looking at programs that will help reduce air toxics emissions from the existing fleet, including retrofit and rebuild programs, incentive programs, and activity reduction programs. In connection with this strategy, the Agency will have several important initiatives under way in FY 2001 to obtain speciation and emissions data for highway and nonroad gasoline and diesel engines. This information will be critical as we continue to assess additional mobile source control strategies.

The Agency will be performing a source apportionment study, to quantify the relative contributions of gasoline and

diesel engines to ambient PM levels. This information will be critical as we continue to assess the need for additional PM controls. Additional data initiatives will include characterizing exposure in micro-environments of concern for mobile sources, and providing assistance on the development of an improved exposure model for mobile source air toxics. Finally, we will continue to provide support for the mobile source component of several important Agency toxics initiatives, including NATA, the National Toxics Inventory (NTI), Cumulative Exposure Project (CEP), and the Integrated Air Toxics Strategy, and will continue to provide support for various health assessment documents and other materials prepared by the Office of Research and Development.

Acid Rain In FY 2001, Phase II of the Acid Rain Program will be in its 2nd year of operation, affecting 2,000 electric utility sources. The market-based approaches pioneered by the OAR for the Acid Rain Program are also being used to solve other air quality problems. For example, OAR operates the NOx Allowance and Emissions Tracking Systems for the NOx Budget Program, as requested by the 12 States of Ozone Transport Region (OTR). Compliance for this program is being phased in over the 1999 to 2001 summer ozone seasons due to litigation complications. Over 900 facilities will require certification of emissions monitors for reporting quarterly emissions data to EPA, which is then made available to the States. Coupled with reductions achieved through Title IV implementation, it is anticipated that the NOx Budget Program will result in approximately a 50% reduction of NOx emissions in the OTR from the 1990 baseline, which will be maintained annually through at least 2002. The 3rd phase of this program begins in 2003.

In 2001 and 2002, OAR and Regions will also be involved in implementing the NOx emission reduction program under the NOx SIP Call or Section 126 Petitions, depending on the outcome of the litigation. The SIP Call could comprise an additional 1,400 units, requiring review of monitoring plans, certification of monitoring methods, and reporting of quarterly emissions. OAR may also be involved in administering the Emissions and Allowance Tracking Systems for this NOx reduction program, involving trading across 22 States.

EPA will continue analyzing the costs and benefits of the Acid Rain Program for inclusion in NAPAP's 2004 Integrated Assessment Report. EPA will also assess the impact on visibility, fine particle, and ozone impacts resulting from Phase II operations for the Ozone Transport Region. EPA intends to continue its partnership with States and Tribes to analyze trends in emissions, deposition, surface water chemistry, and ecology. EPA has targeted a total of just under $4.1 million in State and Tribal Assistance Grants to assess the impacts of acid deposition.

Stratospheric Ozone To address the problem of ozone depletion and its negative impact on human health and the environment, the United Nations Environment Program sponsored the successful negotiation of the Montreal Protocol on Substances that Deplete the Ozone Layer. In effect since 1988, the Protocol requires Parties (currently 168 nations) to control their production and consumption of substances that deplete stratospheric ozone. EPA promulgated and is implementing flexible regulations that eliminate class I ozone-depleting substances (ODSs), require recovery and recycling/reclamation of refrigerants, require labeling of products manufactured using class I substances, identify and promote the use of acceptable substitutes, ban nonessential products using ozone-depleting substances where substitutes exist, and require Federal entities to maximize the use of safe alternatives. EPA's strategies for addressing the ozone depletion problem include:

1. Implement the permit program that limits the production and import of controlled substances, enforces against illegal trade, and promotes flexibility in making the transition to chemicals and technologies that are safe for the ozone layer. Market innovation will continue toward the development of alternative chemicals and processes for refrigeration,

Air-conditioning, and other industrial processes.

2. Develop an allocation program for market-based permits to control the production and consumption of class II compounds (HCFCs).

3. Continue to implement the refrigerant recycling program to ensure the reuse of existing refrigerants, thereby providing economic benefits and avoiding the production of additional ozone-depleting chemicals.

4. Continue to review substitutes for controlled substances to ensure that substitutes do not pose unacceptable health or environmental hazards.

5. Continue to remain active in implementing the provisions of the Montreal Protocol globally. The Multilateral Fund, a component of the Protocol, provides capital and technical assistance to developing countries to support transition to alternatives.

6. Develop an allocation program for market-based permits to control the production and consumption of methyl bromide.

To adequately implement and enforce stratospheric protection regulations, Regions must retain involvement and commitment to compliance monitoring and enforcement actions. The Stratospheric Protection Division relies on the Regions to inspect facilities for potential refrigerant recovery violations, as well as labeling and non-essential use violations. SNAP restrictions are often enforced at the regional level. Title V requires States to include Title VI compliance assurance in their facilities' air permits. Because Title VI of the Clean Air Act Amendments is currently interpreted as not being delegable to the States, any potential permit violations will need to be referred by States to their Regions. It is necessary to continue the valuable work the Regions are currently undertaking to follow up on State and consumer tips, as well as to conduct random inspections, in efforts to ensure stratospheric protection.

Climate Change Long-term consequences of global climate change are considered an extremely high environmental risk. Current greenhouse gas emissions will lead to largely irreversible changes to the global climate change system. As the leading emitter of greenhouse gas emissions, the U.S. has an important role both in reducing its own emissions and leading the rest of the world to control their emissions. The U.S. is demonstrating this leadership in its successful implementation of the Climate Change Action Plan (CCAP), by stimulating energy saving investments to take advantage of opportunities that are currently underutilized to reduce greenhouse gas emissions. The opportunities are sizeable - in 2010, equipment purchased between 1998 and 2010 will account for the majority of energy consumption and carbon emissions in the residential, commercial, and transportation sectors. For example, in the commercial buildings industry, post-1998 equipment purchases will account for 65% of the industry's energy consumption and 71% of the industry's carbon emissions. This is because of the relatively short average lifetimes of equipment (e.g., lighting and light duty vehicles). Replacement of this equipment with more efficient models will significantly reduce greenhouse gas emissions.

EPA will continue efforts to reduce global and transboundary environmental risks through the implementation and development of voluntary programs and will do so in conjunction with future international commitments under the

Framework Convention on Climate Change. By deploying existing, cost-effective, energy-efficient technologies, the U.S. will be able to achieve significant reductions while improving economic growth. Engaging and educating consumers, businesses, utilities, industry, and communities on the benefits of technology and early action will be an important role for EPA. EPA has the goal of altering the marketplace so that it places greater value on energy efficient products and buildings.

Under Article 4 of the Framework Convention on Climate Change, All Parties....shall promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organizations. To fulfill this mandate, EPA will continue to conduct its risk communication program that aims to educate stakeholders and the public about the science, impacts, and solutions of climate change. Constituencies selected to date for outreach efforts include businesses, coastal communities, public health professionals, meteorologists, outdoor recreation and wildlife groups, and schools and universities.

Clean and Safe Water

The Clean Water Act authorizes an essential set of core programs that are our foundation for protecting and restoring water quality. Effluent guidelines provide national, minimum discharge standards for over fifty major industries. Water quality standards provide goals for water quality restoration and protection. NPDES permits control discharges from over 100,000 pollution sources. State and local pretreatment programs assure that facilities discharging to sewers provide appropriate levels of waste treatment. Revolving loan fund programs in each State provide over $2 billion in financing for water pollution control projects each year and have an overall value of over $27 billion. The national wetlands program under section 404 of the Act is the primary defense of the nation's critical wetland resources.

The Clean Water Action Plan sets out clear goals for the National clean water program. The four key themes articulated in the Clean Water Action Plan are:

Watershed Approach -- We are well on our way to building the new, cooperative effort to restore and sustain the health of rivers, lakes, costal waters and wetlands on a *watershed* basis envisioned in the Clean Water Action Plan.

Strong Federal, State and Tribal Standards – The Action Plan called for improving State and Tribal standards as a key step toward protecting public health, preventing polluted runoff and ensuring accountability.

Natural Resources Stewardship – Clean water depends on the conservation and stewardship of the cropland, pasture, rangeland, and forests that are in private and public hands; Federal natural resource agencies are essential to this effort.

Informed Citizens and Officials – Accurate and timely information about the health of watersheds, beaches, fish, and drinking water is the foundation of a sound and accountable clean water program.

Keeping the Nation's clean water program strong and effective over the next several years will require that we work together to maintain our momentum in implementing the Clean Water Action Plan and that we continue the effective implementation of the core programs that are the foundation of the Action Plan; we will be paying special attention over the coming year to work in the following areas.

Watershed Restoration Action Strategies and TMDLs – As States complete workplans for new clean water grant funds, they will use Unified Watershed Assessments to identify impaired watersheds where they will develop Watershed Restoration Action Strategies in FY 1999 and 2000. In many cases, Watershed Restoration Action Strategies will be coordinated with the development of TMDLs for impaired waters. The Clean Water State Revolving Fund will support implementation of the Action Strategies. These Action Strategies are also an opportunity to integrate efforts to protect water quality with our work to protect sources of drinking water and wetlands. Federal agencies will support State efforts to restore watershed health in the identified watersheds.

AFO Strategy – In the spring of 2000, EPA and USDA released a final, joint strategy for reducing water pollution from animal feeding operations. About 5% of these facilities (i.e. the largest facilities and those causing water pollution problems) will be subject to Clean Water Act permits. EPA will provide States with guidance and model permits for these facilities. It is critical that EPA Regions work with States to develop State-specific strategies for permit issuance with the goal of issuing CAFO general permits and selected individual permits this year.

Stormwater Phase II – In the Fall of 2000 , EPA will publish final regulations for control of stormwater runoff from municipalities and construction sites. Permits for these facilities will complement the stormwater permits now in effect for large cities and industrial facilities. These new permits for stormwater and AFO sources, in combination with ongoing efforts to reduce pollution from combined sewers (i.e. CSOs) and sanitary sewers (i.e. SSOs), will result in significant reductions in the conventional pollutants (e.g. sediment and nutrients) reported by States as the most common cause of today's water pollution problems. This work is critical to meeting our annual performance goal of reducing discharges of conventional pollutants by 388 million pounds per year from the 1992 baseline.

Smart Growth – The adoption of "smart growth" policies and implementation of measures to preserve green space and other environmentally critical areas (e.g. riparian areas, wetlands) can have major benefits for water quality. Several national water program projects (e.g. TMDL regulations and stormwater regulations) have the potential to encourage "smart growth" policies.

In addition, water programs need to play an active role in the supporting local efforts to develop plans for use of "Better America Bonds" recently proposed by President Clinton. This new bond initiative can provide a valuable new element of financial plans for watershed restoration and protection.

Sanitary Sewer Overflows -- About 40,000 times each year, sanitary sewers overflow and release raw sewage to streets and waterbodies. To address this problem, EPA plans to propose regulations to provide a clearer regulatory framework, including standard permit conditions. Headquarters will need strong support from Regions in developing and implementing this new effort.

Permit Backlog – The NPDES permit program is the backbone of our efforts to protect water quality and it is critical that we have appropriate and timely permits in place. However, permit reissuance backlogs are unacceptably high in many areas. We need to address this situation this year.

Water Quality Standards Program Modernization – Strong water quality standards that are based on sound science and reflect community involvement are critical to the clean water program.

The Clean Water Action Plan also calls on EPA to publish guidance documents describing methods for the development of numeric criteria for nutrients, including target ranges applicable to different waterbodies and parts of the country. As numeric nutrient criteria are adopted into water quality standards, we will be better able to identify and address water pollution problems caused by nutrients and focus controls for sources of nutrients.

EPA will also assure compliance with the Endangered Species Act, propose ways to limit mixing zones, develop guidance to better prevent degradation of waters that are now clean, support improved coverage of water quality standards in Indian country, promulgate revised methods for developing human health water quality criteria, and work with States to complete the process for adoption and approval of State water quality standards.

Upgrade State Nonpoint Pollution Control Programs -- The Clean Water Action Plan calls for State to upgrade statewide programs for controlling nonpoint pollution to include the nine key elements agreed to by EPA and States by the year 2000. In addition, the Action Plan also calls for final approval of State coastal nonpoint control programs by 2000. Strong programs for preventing nonpoint pollution are critical to the success of the clean water program.

Protecting Water Resources in Indian Country – This past October, we developed a new "Strategy for Protecting Public Health and Water Resources in Indian Country." Near-term priorities identified in the Strategy include establishing a tribal water program environmental presence and using a watershed approach assessing water conditions and implement response programs.

Reinventing Clean and Safe Water Programs – Water program offices will continue to support innovative approaches to reducing water pollution and assuring safe drinking water. For example, proposed regulations for the Total Maximum Daily Load (TMDL) program will encourage "effluent trading" as a way to meet clean water goals in a cost-effective manner.

SAFE DRINKING WATER

The Safe Drinking Water Act Amendments of 1996 provide both the impetus for substantial changes to the national drinking water program for EPA, States, Tribes, and water utilities and greater protection and information to the 250 million Americans served by public water systems. These changes set the course for the drinking water community (EPA, states, Indian tribes, water utilities) to prepare for and address future drinking water safety challenges and assure the sustainable availability of safe drinking water.

Four themes characterize the areas of greatest change. Together, they comprise a balanced, integrated framework of reform and a major national commitment to protect public health.

Public Right to Know -- The Amendments greatly increase the ability of the public to participate in drinking water protection decisions. We have worked hard to include all of the drinking water community in our rulemakings, and with our partners have produced major tools to keep the public well informed.

Focusing on Contaminants of Greatest Risk -- The Amendments emphasize the need for sound science and accurate

data to support our regulatory decisions. EPA has strengthened its ability to produce quality rulemakings by increasing research and data collection, and by developing a process to identify the most harmful contaminants.

Funding and Tools To States and Water Systems – Funding from loans and set-asides in the Drinking Water State Revolving Loan Fund (DWSRF) have allowed states and water systems to improve their ability to provide safe drinking water by upgrading, renovating, and modernizing their infrastructure. EPA has also developed many tools that increase states' flexibility in implementing health-based and program-related regulations.

Pollution Prevention – A major theme of the Amendments is the prevention of contamination of surface and ground water resources that serve as drinking water supplies. Through source water protection, we have made prevention the first step in the multiple barrier approach to drinking water protection.

While the 1996 SDWA Amendments authorize EPA, State, and water utilities requirements through 2005, over the next year we will be emphasizing those activities with a statutory deadline of FY 2000 and early FY 2001, as well as efforts that will augment and complement statutory requirements. These areas of emphasis include:

The Drinking Water Academy -- We will assist states, tribes and territories in understanding new rule requirements and implementing these rules as well as new required guidelines. We will use our new Drinking Water Academy as a way to bring training on these activities to EPA regional staff, the states, Indian tribes and other interested parties.

State Capacity Development Programs -- States will be developing and implementing programs to ensure that water systems have the capacity to comply with existing drinking water rules. Headquarters and the Regions will work with States as they develop their programs. Financial assistance for State capacity development activity is available through the Drinking Water State Revolving Funds. EPA has an annual performance goal that 91% of population served by community water systems will receive drinking water meeting all health based standards in place by 1994.

Source Water Assessments -- High-quality source water assessments will provide needed data to states, water systems, and the public as they protect their water supply. EPA will work with Federal agencies and states to help States conduct these assessments, and to implement programs to protect their source water (including eliminating Class V high-risk shallow underground injection wells). Source water protection is the first step in a multiple barrier approach to drinking water protection.

Increased Research and Data Collection -- We will strengthen and expand the science on priority contaminants for future regulation, identified in the Contaminant Candidate List (CCL), for which there is currently inadequate science and data upon which to base sound risk management decisions. The research needed includes health effects, exposure, analytical methods, and treatment. We will also expand data collection and analysis.

Data Reliability -- We will implement our data reliability action plan to ensure that data entered into the Safe Drinking Water Information System by public water systems is consistent, accurate and of the highest quality so that we can ensure the nationwide safety of our drinking water supplies.

Unregulated Contaminant Monitoring Rule -- We need more data in order to make determinations on what if any new

contaminants should be regulated. EPA will release new requirements on unregulated contaminant monitoring that will provide us with much of this needed data, while reducing burden on water systems.

National Contaminant Occurrence Data Base (NCOD) – EPA will complete and implement the new National Contaminant Occurrence Data Base to give us occurrence information that we need to determine what contaminants pose the greatest health risk. This database will also be made available to the public.

Class V Underground Injection Control Rule -- To reduce the risk of drinking water contamination from shallow injection wells, EPA will publish a rule on Class V wells. This rule will protect sources of drinking water from wells such as industrial disposal wells, service station wells, and large capacity cesspools.

Public Notification Rule -- We will promote public information beyond consumer confidence reports by publishing revisions to the Public Notification Rule. This rule will require water systems to more quickly notify their customers if there is a serious threat to their drinking water supply.

Preventing pollution and reducing risk in communities, homes, workplaces and ecosystems

TSCA Program:

Core TSCA program: The Core TSCA program is an essential component of our efforts to prevent pollution from entering our environment. It reduces the risk of chemical exposure in our communities by preventing the introduction of new chemical substances into commerce that pose an unreasonable risk to health of the environment. The Core TSCA program promotes current scientific knowledge and techniques to evaluate hazards, support the new chemical and biotechnology efforts in rule making, and fosters managing risk for problem chemicals and the dissemination of information and guidance to promote safe use of high production chemicals.

Environmental and public health concerns in the Core TSCA program include protection of public health by identifying and resolving situations where new chemicals have been manufactured without proper health and safety review by the Agency; identifying facilities that have not notified the Administrator under §8(e) of TSCA of situations that present a significant risk to human health or the environment; identifying facilities that manufacture or import "high risk chemicals" that are subject to toxicological testing under §4 of TSCA; and identifying facilities that have not properly reported the manufacture or import of organic chemical substances and "high risk" chemical substances under §8(a) of TSCA.

PCB Program: The goal of the TSCA PCB Program is to substantially reduce exposure to PCBs, both by cleaning up discharge areas and by hastening the removal of PCBs from active, authorized use. This pro-active approach is necessary to prevent the risk of spills or fire, even in equipment where PCBs are authorized for continued use. This risk is of concern because it can occur both in industrial and non-industrial settings, and thus has the potential to impact the public in places where they should feel safe from chemical-based harm.

The TSCA PCB program will promote the early phase out of PCBs from authorized use, support efforts to cleanup both historic and recent discharges, and encourage the disposal of PCB equipment as SEPs in enforcement settlements. The program will continue to supply compliance assistance to facilitate PCB remediation and disposal and will review and, if appropriate, approve risk-based remediation, disposal and alternate decontamination methods.

LEAD (Pb) PROGRAM: Our goals for the FY00/01 Lead program are to provide a trained and certified workforce for use by the public in dealing with the identification and control of lead hazards, and to provide education and outreach to the regulated communities, affected by existing and new regulations, and the public at large. These goals will be implemented through; 1) implementation and authorization of the states' lead programs for accreditation, 2) implementation of the federal program in nonauthorized states, 3) assisting the states in seeking and instituting reciprocity in §402, and 4) conducting outreach and compliance assistance for §1018, §406, §403, the Debris Rule, and §402 (which will include new sections and new disciplines during this MOA period).

Nationally, it is estimated that approximately 4-5% of the children under seven have existing lead burdens over the level of concern (currently 10 micrograms per deciliter of blood). While this is down about 45% from the 1995 average of about 9%, it still indicates a large population of children with a completely fixable problem. Every sale and lease of residential property has at least one and usually more parties who bear responsibility under Title X. Under § 406, the regulated community expands to include countless renovators, remodelers, window replacement firms, plumbers, electricians, and other assorted small contractors to reach with information on the new regulation. In addition to reaching that large population, we also need to reach all Lead-Based Paint professionals and firms with the Debris Rule, the § 403 Lead Hazard Standards, and the new elements and disciplines under § 402.

The FY00/01 Core Priorities generally are complimentary between OPPTS and OECA. Though the priority order is different, both list Section 402/404 (accreditation and training) rule implementation and Section 1018 (disclosure) rule implementation as high priorities. Where OPPTS focuses on Disclosure Compliance assistance, OECA compliments this effort with implementation of the rule. For accreditation and training, both offices focus on implementation of the rule in unauthorized states. OPPTS focuses further on authorizing states with legislation, and the review and approval process. There are no conflicting areas.

EPRCA 313 PROGRAM: The EPCRA 313 program goal is to ensure that no community is deprived of valuable toxic release information due to lack of knowledge or misunderstanding of TRI and /or failure to report by the regulated facilities. EPA ensures that facilities are reporting on a timely basis through a strong industry assistance program focusing on pollution prevention information and quality of the data and a strong compliance monitoring program. Furthermore, the agency evaluates and ensures the reasonableness of the reported releases through data quality reviews.

OPPT national priorities include industry outreach with emphasis on newly added facility sectors, coordination with states, promotion of TRI data use, participation in conference calls and participation in monthly TRI program management conference calls. These activities also address the OECA national priorities for FY00/01 for the EPCRA 313 program to focus on non-reporter, newly regulated facilities (first time reporters), data quality inspections, and to promote a complete and accurate TRI database through enforcement and compliance assistance for the newly covered facilities. These national OPPTS/OECA priorities compliment each other as both promote compliance by the regulated community and the development and utilization (by industry, the states, and the public) of a complete and accurate listing of toxic chemical releases to the environment.

POLLUTION PREVENTION PROGRAM: Under the Pollution Prevention Act of 1990, it is the policy of the United States "that pollution should be prevented or reduced at the source whenever feasible" and "pollution that cannot be prevented should be recycled in an environmentally safe manner". Treatment and disposal of pollution should be used

as a last resort. In other words, pollution prevention (P2) is the preferred approach to environmental protection. Toward that goal, EPA has set the following three objectives for FY00/01: 1) integration of P2 into regional, state and tribal environmental regulatory programs, 2) better coordination and collaboration among government and non-government P2 assistance providers, and 3) reduction and/or elimination of persistent bioaccumulative and toxic (PBT) substances in the environment, and support of cleaner technology DfE activities.

PESTICIDES PROGRAM Community empowerment, partnerships, and stewardship are the highest priority in the Pesticides program. We seek to foster environmental stewardship and community empowerment through education and outreach. Our goal is to ensure that communities, workplaces and ecosystems are safe from pesticide pollution by relying on pollution prevention methods to eliminate, reduce and minimize contamination by pesticides.

Efforts under the Worker Protection priority include ensuring that workplaces and migrant workers housing, as well as their drinking water sources, are safe from pesticide contamination, thereby reducing the number of workers suffering from adverse health effects caused by pesticide poisoning.

The agency also strives to protect ground water from pesticide contamination by working with the States to increase their capacity to ensure that pesticide residue levels are within health standards through Generic State Management Plans (GSMPs) and once the Final Rule will be signed in effect, through Chemical Specific State Management Plans (CSSMPs).

Information will be key factor in addressing these issues. One of our goals is to deter future violations and return violators to compliance, providing protection to all populations. Increased public awareness, through publicity of ineffective or unregistered products, or the adverse effects associated with the use of a particular product, will offer the public the means to better protect themselves and also to participate as stewards in alerting us to violations in need of enforcement. Community empowerment is the umbrella for conducting all the priority activities, and will serve to integrate the OPPTS and OECA program priorities, which are complimentary. Outreach will play a key role in the Urban Pesticide Misuse program since widely accessible information will foster knowledge and environmental stewardship.

FIFRA, TSCA, EPCRA FEDERAL Compliance and Enforcement Activities

The focus of the toxics and pesticides compliance and enforcement program for FY 2000-2001 is ensuring the public's right-to-know about chemicals in their environment. EPA and the public rely on the EPCRA Toxic Release Inventory for information on chemicals entering the environment. Other EPCRA requirements provide data which facilitate informed decision-making on exposure and local emergency planning. EPA must ensure that companies report data accurately and within required time frames. The public's right-to-know is also encompassed in the TSCA regulatory programs for asbestos, PCBs, and lead based paint, as well as core TSCA. Facilities that are potentially subject to core TSCA provisions (TSCA sections 4 ,5, 8, 12 and 13) number over 130,000 facilities. Existing and new chemicals manufactured and processed in these facilities may pose significant risks to workers and the environment. Core TSCA is unique in that it relies on companies' submission of data to the Headquarters program office for review and risk analysis, and most of the data is Confidential Business Information, the handling of which is statutorily controlled. Core TSCA also requires investigators with an understanding of chemistry and chemical reactions.

EPA and the public rely on pesticide manufacturers to provide accurate information about pesticides and their

associated risks. Unregistered and ineffective antimicrobials, as well as products making false or misleading public health protection claims, pose a potential public health threat when the public is given inaccurate or misleading information which may lead to inappropriate choices. Farm workers using pesticides must be informed about exposure to pesticides that are used on agricultural crops and must be informed how to properly handle and apply pesticides. In addition, residents in urban and residential areas must be protected from illegal distribution, sales, or application of agricultural pesticides to control pests in urban and residential settings.

For FIFRA, the primary focus is on providing assistance/training/oversight to states/tribes carrying out FIFRA related enforcement under cooperative enforcement agreements. This includes issuing credentials as appropriate and providing training and grant oversight. Regions should refer to the Federal facilities section of this attachment (Section 8) for guidance on including Federal facilities in core program activities where applicable. EPA is responsible for enforcing data quality requirements (GLPs), section 7 establishment registration and the submission of production data, import and export requirements, and the reporting of unreasonable adverse effects under section 6(a)(2) of FIFRA. States conduct product compliance inspections and may take the enforcement action or in some cases, EPA does, e.g., some WPS violations and product cases involving antimicrobials failing efficacy tests. Regarding enforcement of pesticide use provisions, the statute gives primary use enforcement responsibility to the states. EPA has a state oversight and training role, as well as a compliance assistance role.

Federal Compliance Assistance In general, compliance assistance should be a focus in follow up to the issuance of new or amended regulations, and will also be incorporated into national sector, or other, compliance and enforcement initiatives as appropriate. With regard to initiatives, these are collaboratively developed by Headquarters and the regions/states. Examples of recent compliance assistance initiatives include the Chemical Industry Sector Strategy's EPCRA project, EPCRA 313 reporting guidance for specific industry sectors (food processing, rubber and plastics, and the semiconductor industries), and Internet access to comparative TRI data from facilities in five sectors via the Sector Facility Indexing Project. The strategies for previous initiatives have also included a focused compliance assistance period with a recommended time frame for targeted assistance to ensure that the regulated community has the information which they need to comply. (Note: SFIP is a regional data analysis and targeting tool. The information in SFIP could be used by a region to provide "compliance assistance" to specific sectors by analyzing the relative quantities of data in the system and identifying the better facilities).

For the chemical industry, the Regions should promote and utilize, where appropriate, ChemAlliance, the new compliance assistance center for the chemical industry. ChemAlliance can be used by HQ, the Regions and States as another tool to provide multi-media compliance assistance, including information related to TSCA, EPCRA and FIFRA. Appropriate Regionally developed compliance assistance materials can also be made available through ChemAlliance.

For FIFRA, the National Agriculture Compliance Assistance Center will continue to develop and provide compliance assistance materials related to FIFRA, Worker Protection requirements, and other EPA requirements that impact the agricultural community. Regions should familiarize themselves with the material offered by the center and provide compliance assistance materials as they give presentations to agricultural groups/trade associations. Priority areas for compliance assistance activities include FIFRA section 6(a)(2) requirements, i.e., unreasonable adverse effects reporting, and to low income communities as part of the urban initiative. In addition, regions should review compliance data to identify compliance assistance needs and provide input to the Center and the Agriculture Branch in OC. Regions are also encouraged to provide the Center with outreach materials that they/their States develop. Another

area for compliance assistance relates to citizen complaints and ensuring that those use cases involving allegations of significant harm are tracked under FIFRA section 27 and adequately responded to.

Federal Compliance Incentives Regions should promote OECA's compliance incentive policies (e.g. small business policy, audit policy, etc.) to encourage the regulated community to voluntarily discover, disclose and correct violations before they are identified by regulatory agencies for enforcement investigation or response. As discussed in the core program definition, regions should consider and follow-up on, as appropriate, disclosures submitted under the OECA audit policy and small business policy. Regions should work collaboratively with Headquarters on other compliance incentives involving multi-regional cases and/or sector approaches.

Federal Compliance Monitoring To maintain an effective compliance monitoring program, regions must allocate limited resources as effectively as possible, and trade-offs will have to be made. However, to the maximum extent possible, regions should target and conduct inspections and investigations (including show cause letters or subpoenas where appropriate) for: 1) EPCRA - EPCRA 304/CERCLA 103; EPCRA 313 - data quality; non-reporters ; 2) FIFRA - antimicrobials; labeling investigations, especially for WPS; Section 7; point-of-entry, dealers, or RUP dealers; urban pesticides; and 3) TSCA - asbestos - AHERA; asbestos MAP; PCBs; lead-based paint- 1018 and 402/404/406; core TSCA

Inspections are expected to be completed for every core program area. As a general matter, Headquarters expects regions to maintain inspections at FY 97 levels, assuming that the inspections have proven valuable in identifying areas of noncompliance and supporting enforcement efforts. Regions should ensure inspection coverage in states without EPA enforcement cooperative agreements. Regions are expected to track and prioritize tips/complaints, and follow-up, as needed. ("Follow-up" means that the region needs to evaluate the tip/complaint to determine the appropriate next step, and either: 1) refer the tip/complaint to a state as appropriate and track it through resolution consistent with national guidance; OR 2) obtain additional information through federal investigation/show cause letter if necessary and issue appropriate federal action.) Regions are also expected to follow-up on all referrals received from Headquarters and states.

Federal Enforcement Actions Regions are expected to respond to violations in a timely manner, and in accordance with national policy as contained in the individual program enforcement response policies. All self-disclosures and referrals should be evaluated and brought to closure in accordance with national policies. Regions should reduce the federal case backlog, if any (i.e. settle or litigate cases issued in years prior to FY 2000, and ensure investigation and issuance of appropriate action for any open tips/complaints/ referrals received by EPA in years prior to FY 2000).

FIFRA/ TSCA Program Leadership and Evaluation

DATA ENTRY: It is critical that the regions enter all federal and state data into the FIFRA/TSCA Tracking System (FTTS), which is then merged into the TSCA, FIFRA, & EPCRA 313 National Compliance Data Base (NCDB). It is important for timely data entry to occur, for purposes of national analysis and publication of data as appropriate. Headquarters will be tracking data entry and discussing it with regional management. Regions should also enter data for EPCRA 301-312 into the National Enforcement Compliance Tracking and Reporting System (NECTAR) database.

PRESS RELEASES: The regions should use press releases for regional activities which are not part of national

initiatives, as appropriate, in order to promote further compliance.

STATE COOPERATIVE AGREEMENTS: OECA will provide a draft pesticides and toxics state enforcement cooperative agreement guidance for review and comment separately from the MOA guidance. This guidance, once finalized, should be followed by the EPA Regional offices when negotiating enforcement cooperative agreement commitments. For purposes of the MOA discussions, OECA is looking for each region's projections on the number of FIFRA, asbestos, lead 402, and PCB inspections which they will be using as the basis for negotiations with each of their state enforcement grantees.

Indoor Air

EPA stresses non-regulatory approaches to reduce the health risks from indoor air hazards, and in FY 2001 will continue to emphasize implementation of the Administration's initiative to reduce childhood asthma. Partnerships between EPA and national organizations with state, tribal, and local affiliates create over 900 community-based environmental programs working on public health priorities related to indoor environments. These programs specifically focus on: heightening public awareness about childhood asthma and increasing actions to reduce the presence of environmental triggers of asthma inside homes and schools; reducing children's exposure to environmental tobacco smoke in residences by encouraging parents and care givers to smoke outside; and supporting state programs to reduce citizen's exposure to radon in the indoor environment. Key components of the strategy include:

1. Based on the National Academy of Sciences report on the relationship between indoor air pollutants and asthma, identifying and supporting effective intervention strategies to reduce exposure to indoor triggers of asthma.

2. Identifying gaps in policy and guidance that promote good indoor air quality, determining whether those gaps can be filled most appropriately by EPA or by influencing others to do so with our endorsement.

3. Reducing risk by raising public awareness of potential indoor health risks and steps that can be taken to reduce exposure, using a variety of means including written materials, hotlines, media campaigns, and incentives where appropriate to influence the way people function inside buildings and the way that buildings are designed, operated, and maintained for healthier indoor quality.

4. Measuring progress in meeting program goals by collecting and analyzing bottom-line, intermediate, and preliminary results.

Radiation EPA's strategy is aimed at protecting the public and the environment from unnecessary exposure to radiation. For FY 2001, this includes: developing and issuing standards and guidance to limit public and environmental exposure to radiation and ensure safe waste disposal; working with the public, industry, the States, and other government agencies to inform and educate people about radiation risks and promote actions that reduce human exposure; measuring environmental levels of radiation and assessing radiation effects on people and the environment; and the continued coordination of national radiological emergency response efforts and Federal, state, and local activities during emergency situations.

The development and issuance of standards and guidance for radiation both directly and indirectly impacts the public's exposure to radiation. EPA's work includes providing technical support on EPA standards for Yucca Mountain and inspection of DOE waste generator sites prior to shipment of waste to the Waste Isolation Pilot Project (WIPP). These activities could not be effectively conducted without the fundamental scientific understanding of the health effects of exposure to radiation developed by the continual review of risk assessment techniques, and available data on health effects. This ensures that EPA is technically competent when developing regulations and guidance.

For radiation information, the strategy is to actively participate in the agency's Information Integration Initiative by adding radionuclides into the Toxics Release Inventory and developing a radiation information Envirofacts Internet site focused on integrating TRI information with other radiation information in CERCLA, RCRA, SDWIS, and AIRS.

Public outreach efforts play a key role in coordinating and disseminating information relating to actions that reduce human exposure to radiation. Since the public looks to EPA to accurately evaluate and inform them on real or perceived risks, EPA responds to this need by developing brochures, fact sheets, and information in the Internet, to reach out to the public and inform them of the potential impacts of radiation exposure.

EPA has 2 laboratories which have developed into centers of excellence for analyzing samples containing radioactive components and providing capability for responding to and analyzing radiological accidents. These efforts are coordinated through the Federal Radiological Emergency Response Plan and include a number of other key Federal agencies. In support of capabilities for assessing exposure to emergency actions, the labs also provide ambient monitoring and analysis support. The analytical support provided by the labs to Federal facilities allows accurate assessment of risks posed by radiation at these facilities and assists in the coordination of clean-up activities.

Consistent with the national program, the regional radiation programs focus on controlling and limiting radiation exposures of the general public from manmade and naturally-occurring sources. Regional program activities are numerous, with the potential for significant risk reduction. Regional staff function as technical consultants within the Regional Office. The radiation support provided ranges across a wide spectrum from site assessment to regulatory compliance (e.g.,radionuclide NESHAPs) and radiation safety officer duties. Regional staff participate in emergency response exercises and incidents. Close linkage is maintained with HQ and the 2 labs to enhance program accomplishments and effectively use limited resources. Regional programs also serve as a liaison to state radiation control programs and local offices of other Federal agencies.

Better waste management, restoration of contaminated waste sites, and emergency response

Superfund

The continued focus of the Superfund program in FY 01 is to maximize the protection of human health and the environment through fast, efficient cleanup of priority hazardous waste sites and releases. Protecting public health and the environment, promoting a fundamentally fairer Superfund program, maximizing program effectiveness and efficiency, building Superfund partnerships, and encouraging a customer orientation are Superfund's highest priorities for FY 01. Superfund also shall work toward reauthorization and show program progress through Superfund Reforms and compliance with GPRA. EPA is committed to increasing the number of NPL construction completions. To accomplish this objective, the Agency will ensure that available resources are disbursed in a fiscally sound manner—according to the risk prioritization scheme, and that appropriate contract vehicles (including performance based contracts and IAGs) are available. In addition, the Superfund program will provide real time policy calls to

promote efficient cleanup. Maximizing potentially responsible party (PRP) involvement will be imperative to meeting this goal.

Construction Completions - The goal established by the President is 900 construction completions by the end of calendar year 2002. There are a sufficient number of sites with final Record of Decision (RODs) signed to meet this goal. Sites in the Remedial Design/Remedial Action (RD/RA) stages will be efficiently managed to ensure work continues in a timely manner through to construction completion. Regions and States and other Federal Agencies must continue to work together to identify opportunities for expediting construction completions and response actions.

Innovative Technologies - Environmental technology development and commercialization are a top national priority for this Administration. EPA is committed to encouraging the use of new or innovative technologies for contaminated soils and ground water. Over the next decade, the Superfund program and other Federal agencies will spend billions of dollars each year to cleanup sites contaminated with hazardous wastes. This commitment will require the use of a wide range of site remediation processes. While existing technologies to characterize and remediate contaminated sites have ben successful, the investment in site clean up offers new opportunities for the development of less expensive and more effective solutions.

Fairer Superfund Enforcement Program - EPA must ensure fair treatment of all PRPs, especially small volume contributors and parties with a limited ability to pay who will be targeted for early and prompt settlements. PRP searches to pursue parties identified by other PRPs will be emphasized, as will Alternative Dispute Resolution (ADR). Steps will be taken to reduce private sector transaction costs associated with cleanup of contaminated sites.

Enforcement First/Cost Recovery - In order to leverage the number of cleanups that can be accomplished, maximizing PRP participation is a priority. Key areas of continuing emphasis are early initiation of PRP searches, completing negotiations in a timely manner, and maximizing PRP-lead cleanup activities. For cost recovery, the emphasis will be on addressing all sites with total outstanding costs greater than $200,000 prior to the expiration of the Statute of Limitations (SOL), and encourage the Regions to address high dollar cases and sites with non-settling, or non-complying parties that could be targeted for cost recovery action.

Maximizing Program Effectiveness and Efficiency - To maximize the effectiveness and efficiency of the Superfund program during FY 01, EPA HQ and Regions will work to: Develop appropriate long-term contract strategies;

Continue to improve WasteLAN system for project, program, and enforcement management of Superfund, and ensure that there are subject matter experts for key areas; Enhance resource management controls;
Adjust administrative and communication processes to suit the new organization; Strengthen the program by incorporating quality assurance, peer review, and program evaluation components into rule makings, guidances, and policies; Make changes in the implementation of the program based on these processes; and Enhance the Agency's approaches to post cleanup site management.

Site Assessment - EPA is encouraging Regions to spend 10 percent of their allocated funding on special project initiatives. The goal is for Regions to find alternative ways to maximize program effectiveness and efficiency. Prior to

beginning a special project, Regions need to prepare a list of target goals and outline ways to achieve each intended goal.

Priorities for site assessment include listing appropriate sites on the NPL, evaluating the backlog of sites in the CERCLIS inventory to determine high-priority sites and those not requiring Federal response action, and assessing non-CERCLIS sites in conjunction with EPA's Brownfields initiatives. The percentage of site assessment funding devoted to each of these priority areas will not be established given variations in Regional workloads; however, careful balancing of these priorities is important given constrained site assessment resources.

Assessing the worst sites first continues as a national priority. The Regions should identify the sites posing the highest risk or potential risk and develop a strategy to assess those sites in a timely manner, while balancing their other site assessment needs.

Base Closures - Under the Base Realignment and Closure Acts of 1988, 1991, 1993, and 1995, 205 military installations are scheduled for closure or realignment. Of this total, 108 are part of President Clinton's Fast Track Cleanup Program, and of those, 32 site are on the NPL, and there are a number of non-NPL sites requiring some degree of decontamination. The Agency must continue to assist DoD in assessing these properties, accelerating cleanup actions wherever possible, listing sites on the NPL where appropriate, and ensuring that remedies selected reflect the views of affected communities at NPL sites meet Superfund criteria. HQ and Regional managers must work with DoD, Tribal, State, and local governments, and private interests to expedite cleanup and support responsible transfers of Federal property to non-Federal parties for reuse and economic development.

Effective Contract Management - Good contract management is a Superfund priority, as well as an Agency-wide priority. The Agency is completing the final phase of implementation of the Superfund Long-Term Contracting Strategy (LTCS). (LLTCS provides the mechanisms for greater contractor flexibility and improved oversight and cost management by giving Regions full responsibility for contract management.

Building Superfund Partnerships -FY 01 goals to support building Superfund partnerships and leveraging existing resources are: Provide tools for Regions to use to promote and continue early community involvement in key clean-up decisions, specifically regarding land use, risk assessment, and RODs; Work with State, Tribal, and business associations to determine ways to improve their capabilities to clean up hazardous substances and respond to spills; and Implement a cooperative program with oil companies to prevent and respond to leaking above ground tanks.

Initiatives include continuing the implementation of the Brownfields Economic Redevelopment Initiative, enhancing the State/Tribal role, providing States/Tribes with increased funding allocation decision authority, clarifying the policy for NPL listings and deletions of sites based on RCRA deferral, and providing States and Tribes with an increased role in remedy selection.

Enhanced State and Tribal Capabilities - EPA recognizes and supports the continued growth of the State and Tribal regulated and voluntary programs. Working collaboratively with State and Tribal representatives, EPA completed a comprehensive strategy to further advance the goal of increasing the number of site cleanups through a greater state and tribal role.

States and Indian Tribes are key partners in the cleanup of Superfund hazardous waste sites. Regions should continue their efforts to enhance the role of States and Tribes in the Superfund program. We strongly encourage the use of the full range of cooperative agreements to provide financial support for State and Tribal Superfund programs and site-specific involvement in NPL sites.

Superfund Block Funding/EPA Performance Partnership Grants - By statute, Superfund monies cannot be included in PPGs, because these funds may not be expended for purposes other than Superfund. Nonetheless, several States are including their Superfund programs in NEPPS agreements and, in time, it may be feasible to include Superfund resources in PPGs. In the near-term, Superfund is exploring the feasibility of Superfund Block Funding awards to move in a direction consistent with PPGs; block funding awards have been made to twelve States and three Tribes. EPA will be working to encourage further progress toward the goals of flexible funding within the context of strong program commitments to Superfund outcomes.

Superfund Reforms

On June 23, 1993, EPA Administrator Carol Browner announced 17 initiatives aimed at: (1) increasing enforcement fairness and reducing transaction costs; (2) improving cleanup effectiveness and consistency; (3) expanding meaningful public involvement; and (4) enhancing the State role in the Superfund program. On September 30, 1994, EPA issued the "Superfund Administrative Reforms Closeout Report," which identified lessons learned from the first round of reforms. It also closed out several of the initiatives and identified a group of continuing initiatives to be integrated into the Superfund program.

In February 1995, EPA announced an additional 12 initiatives designed to improve the Superfund program. This second round of reforms encompassed six general areas: enforcement; economic redevelopment; community involvement and outreach; environmental justice; consistent program implementation; and State and Tribal empowerment. Many of these initiatives included pilots that are continuing to furnish information on the operation and changes in the program.

In October 1995, EPA Administrator Carol Browner announced the third and final round of "Superfund Reforms." This third round of "common sense" reforms was intended to assist State and local governments, communities, and industries involved in cleanups to more easily: (1) make cost-effective cleanup choices that protect public health and the environment; (2) reduce litigation so more time and money can be spent on cleanup and less on lawyers; and (3) help communities become more informed and involved so that cleanup decisions make the most sense at the community level.

The FY 01 priorities for Superfund reforms are: (1) completion of ongoing reform commitments; (2) consistent implementation of reform initiatives in HQ and the Regions; (3) refinement of the reforms based on experience to date; and (4) further evaluation of reforms and enhanced communication of impacts and results to stakeholders.

Redevelopment Initiative - Superfund cleanups address real threats to public health and the environment and have been instrumental in returning sites to productive uses. In the last five years, EPA has become increasingly aware of the importance of fully exploring future use opportunities at Superfund sites with its partners before selecting and implementing cleanup remedies. This shift in thinking in Superfund has resulted in Superfund sites, which were once

thought to be usable, being "recycled" back into productive use. EPA is encouraging the reuse of Superfund sites in several ways, such as making cleanup decisions that lead to the reuse and limiting the liability of interested developers. Large and small businesses, shipping terminals, community libraries, sports fields, and golf driving ranges are just a few of the many ways in which Superfund sites are being reused following their cleanup.

Superfund is embarking on a nationally coordinated effort — the Superfund Redevelopment Initiative — to facilitate the return of Superfund sites to productive use. While operating within the current regulatory and statutory framework, EPA will take full advantage of its administrative flexibility in the Superfund Redevelopment Initiative. The Superfund Redevelopment Initiative will include a series of pilot projects designed to enhance the involvement of local governments in determining the potential future uses of Superfund sites and to demonstrate tools that can be used to facilitate the redevelopment of Superfund sites. Ten pilot sites were selected during FY 99 and up to forty additional pilots will be selected during FY 2000.

Brownfields

Brownfields National Partnership Action Agenda - EPA convened an interagency working group of more than 20 Federal departments and agencies to coordinate Brownfields activities. The workgroup has developed the National Partnership Action Agenda, which includes specific commitments of resources and activities supporting Brownfields from EPA and its Federal partners (HUD, HHS, DOC, GSA, DOT and others) as well as non-Federal partners. The National Partnership demonstrates how coordinated action on Brownfields cleanup and redevelopment at the Federal level can help support efforts at the local level.

Brownfields Pilots - As part of the Brownfields Action Agenda, the Agency has awarded 307 Brownfields Assessment Demonstration Pilots that are funded through cooperative agreements of up to $200,000 each for a two-year period. The Brownfields pilot program is intended to provide EPA, states, local governments, and Federally recognized Indian tribes with useful information and new strategies for promoting a unified approach to environmental assessment, clean-up, and reuse. EPA also has 21 Brownfields Job Training and Development Demonstration Pilots, and 68 Brownfields Clean-up Revolving Loan Fund (BCRLF) Pilots. The Job Training Pilots are each funded up to $200,000 over two years, and bring together affected stakeholders to address the issue of providing environmental employment and training for residents in communities impacted by Brownfields.

In addition to the Assessment, Job Training and BCRLF pilots, EPA, in partnership with more than 15 Federal agencies, has designated 16 Brownfields Showcase Communities as part of its National Partnership commitments.

Targeted Brownfields Assessments - EPA's Targeted Brownfields Assessment (TBA) program is designed to help States, Tribes, and municipalities especially those without Brownfields Assessment Demonstration Pilots, minimize the uncertainties of contamination associated with Brownfields.

Tax Incentive - On August 5, 1997, President Clinton signed the new tax incentive into law. It provides the same tax incentive for prospective purchasers, allowing them to "expense" their cleanup costs at Brownfields sites over a relatively short period of time rather then "capitalize" them over the useful life of the property. The Brownfields tax incentive sunsets after five years, thereby covering eligible costs incurred or paid from the date of enactment until December 31, 2001.

Oil Program

The Agency shares responsibility with the United States Coast Guard (USCG) and other agencies for implementing major provisions of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). EPA will work on finalizing proposed revisions to the Oil Pollution Prevention regulation, also known as the Spill Prevention, Control, and Countermeasure (SPCC) regulation; work with facilities on ensuring compliance with the SPCC regulation; continue the review, inspection, and approval of facility response plans (FRP); continue the development and improvement of area contingency plans (ACP) and participation in area drills and other exercises; and respond to oil spills, or direct, monitor or support others' responses, in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

RCRA CORRECTIVE ACTION

1. Program Vision/Expectations: Fulfill Congressional mandate to address uncontrolled environmental contamination at all treatment, storage, and disposal facilities managing hazardous waste. Specifically, by FY 2005, human exposures are to be controlled at 95%, and groundwater releases controlled at 70% of the 1,700 high-priority RCRA facilities in the 1997 GPRA baseline. Achieving final cleanups for all treatment, storage, and disposal facilities remains the long-term goal.

Use RCRA remedial authorities to complement other EPA and state authorities and to address high priority contaminated sites not otherwise addressed.

2. Strategy

Clearly identify facilities subject to the Congressional mandate.

Assess all facilities within this universe to identify high priority facilities.

Focus EPA and authorized state resources first on high priority facilities; at these facilities, achieve cleanups that eliminate unacceptable human exposure and control groundwater releases.

Develop measures that more completely reflect final success at RCRA facilities, set goals for those measures, and track our progress in meeting them. In tracking progress, reflect all actions at a facility that meet RCRA objectives regardless of the authority or program used to require that action.

Lower priority facilities should not be the focus of resources while higher priority sites remain unaddressed. Encourage cleanups at these facilities "voluntarily" by the owner/operator or under state cleanup programs.

Promote Brownfields activities. Encourage redevelopment activities at high priority facilities. Create flexibility within the existing framework of RCRA rules to help promote Brownfields projects. Encourage greater use of state non-RCRA cleanup programs to promote Brownfields cleanups, particularly at medium and low priority facilities.

Use a wide range of methods and innovative approaches in carrying out corrective action, and focus on results rather

than process.

Leverage the resources of non-RCRA state cleanup programs, water authorities, etc., which in many cases are doing cleanups at RCRA facilities. Alternative state programs, whether authorized or non-authorized, should also be used to meet our GPRA goals.

Ensure a full and appropriate role for the public – particularly the local public – in remedies at RCRA facilities.

Eliminate regulatory and process impediments to effective cleanups. encourage use of available flexibility.

RCRA PERMITTING

1. Program Vision/Expectations: Fulfill Congressional mandate to permit all treatment, storage, and disposal facilities managing hazardous waste. Specifically, approved controls are to be in place to prevent dangerous releases to air, soil and groundwater at 90% of facilities in the 1997 baseline.

All permits issued are of a high technical quality and protective of human health and the environment. There is meaningful public and community involvement in all permitting actions.

Permits are appropriately enforced, and are modified promptly to reflect new conditions. Permits are renewed at the appropriate time with full public participation.

2. Strategy

Emphasize the State-Federal partnership in reaching the GPRA permitting goals. In most cases states are the permitting authority; but EPA has expertise to contribute, e.g., in highly technical areas like combustion.

Regions and states will commit to an objective process for prioritizing work that considers risk and the overall priority ranking of the facility.

Fully authorize all states so that they are in a position to issue the full HSWA permit (particularly corrective action).

Closing facilities subject to the post closure care are put under effective controls (e.g., closure plans approved and closure certified). Flexibility of the post-closure rule should be used to impose post-closure requirements through mechanisms other than full RCRA permits.

Assure full and meaningful public participation from time of the initial application, and throughout the permitting process. Provide assistance (particularly in environmental justice communities) as needed to make sure the participation is as representative and constructive as possible.

Ensure that environmental justice concerns are considered in all new permit and renewed permit actions.

Hazardous Waste Minimization and Recycling

1. Program Vision/Expectation: Support minimization of waste volumes to the fullest extent possible and assist industry with the reduction or elimination of harmful hazardous materials and waste beginning with the persistent, bioaccumulative, and toxic (PBT) chemicals from waste streams. At a minimum the Nation should achieve a 50% reduction of PBTs in Hazardous Waste by the year 2005 through source reduction activities and increase recycling by 25%.

2. Strategy

Target facilities identified from sector analysis as high priority PBT generators for direct waste minimization assessments and assistance. Prioritize facilities on a sector basis with a special emphasis on facilities that fall in environmental justice areas and children's health initiatives.

Provide technical and educational assistance to industry (especially small business) in reducing waste streams and promote continuous improvement initiatives for waste minimization, especially of PBTs.

Using a regional Pollution Prevention Coordinator's Task Force, establish senior management support for development of incentive-based programs (for example, reg flex, permit standards, awards) that reward further waste minimization, recycling and pollution prevention and remove regulatory barriers to progress. Focus the incentive-based programs will focus on eliminating highest ranked PBT constituents.

Promote Environmental Management Systems to manage waste min. and pollution prevention as an integral component of business.

Use industry, associations and other technical assistance providers to help promote and implement waste minimization and pollution prevention.

Expand the reach of projects such as the New Jersey Chemical Industry Material Exchange Project that assists industry in identifying material re-use scenarios that would otherwise end up being hazardous waste. Possibly create an "E-Bay" for industrial chemicals (low cost transactions internet)

SOLID WASTE MINIMIZATION AND MANAGEMENT

1. Program Vision/Expectations: In partnership with states, tribes, industry, and environmental groups, who are all active stakeholders in the national program, ensure safe management of industrial and municipal solid waste at disposal facilities; and promote waste prevention and recycling of solid waste.

2. Strategy

In Partnership with the states and Tribes, develop and revise national standards and guidance. Make the standards relevant and appropriate given the diversity of issues facing states and local governments.

Inform citizens of appropriate means of managing municipal and industrial, non-hazardous wastes so they will have better opportunity to ensure their communities are protected from adverse impacts caused by the generation and

management of industrial wastes.

In Partnership with states, develop programs and outreach activities to foster reduction of solid waste containing PBT substances such as mercury, cadmium, lead, etc.

Provide technical assistance and training to states, Tribes, municipalities, and industry.

Support waste reduction and recycling through research, recycled market development, targeting, and partnerships with industry, citizen's groups, and the public.